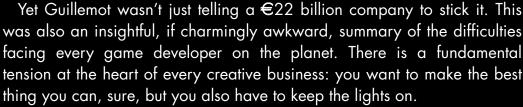




In case of emergency, deploy Miyamoto quote

You're forgiven if you completely missed the most important moment of this year's E3. It came at the end of Ubisoft's press conference, when company CEO **Yves Guillemot** issued a thinly veiled hands-off message to bosses at Vivendi, who were rumoured to be plotting a hostile takeover of the French publisher. "The real magic," Guillemot said, "happens when teams are free to create. When you are free, there is no failure – there is only forward." Flanked by the developers who had taken the stage during the preceding conference, Guillemot told Vivendi that he did not want its money, and neither did his teams. That they had his back, and he theirs. Even that kind of crazy-looking bearded guy who made *Red Steel*.



Delays are nothing new in the game business. The fact that a Shigeru Miyamoto musing pushing 20 years old is still rolled out is proof enough of that. But as budgets soar, so do the implications of failing to deliver games on schedule. Yet slippage has become a defining factor of this console generation. Clearly the cost of putting out a good game late is nothing next to the damage a bad game can do, whenever it arrives.

Activision, however, has devised a third way. Faced with the uncomfortable, but unavoidable, reality that *Destiny 2* wasn't going to ship this year as planned, it made the thoroughly un-Activision decision to push it into 2017. Inevitably, there was a catch. OK, Bungie, you can have the additional time you need to make *Destiny 2*. But you're going to have to make something else for 2016 as well. On p62, we visit the studio to find out how it's managed to pull off something that Shigeru Miyamoto, all those years ago, would surely have thought impossible.



Exclusive subscriber edition



games

Hype



42 Horizon Zero Dawn

46 Sniper Elite 4
PC, PS4, Xbox One

50 Battlefield 1 PC, PS4, Xbox One

52 God Of War

Future Unfolding

56 The Elder Scrolls: Legends Android, iOS, PC

58 Hype Roundup

Play

104 Deus Ex: Mankind Divided PC, PS4, Xbox One

108 Abzû PC, PS4

112 I Am Setsuna PC. PS4. Vita

114 Quadrilateral Cowbo

116 Headlander PC, PS4

118 Bound PS4

119 Song Of The Deep PC, PS4, Xbox One

120 Overcooked PC, PS4, Xbox One

122 The Assembly



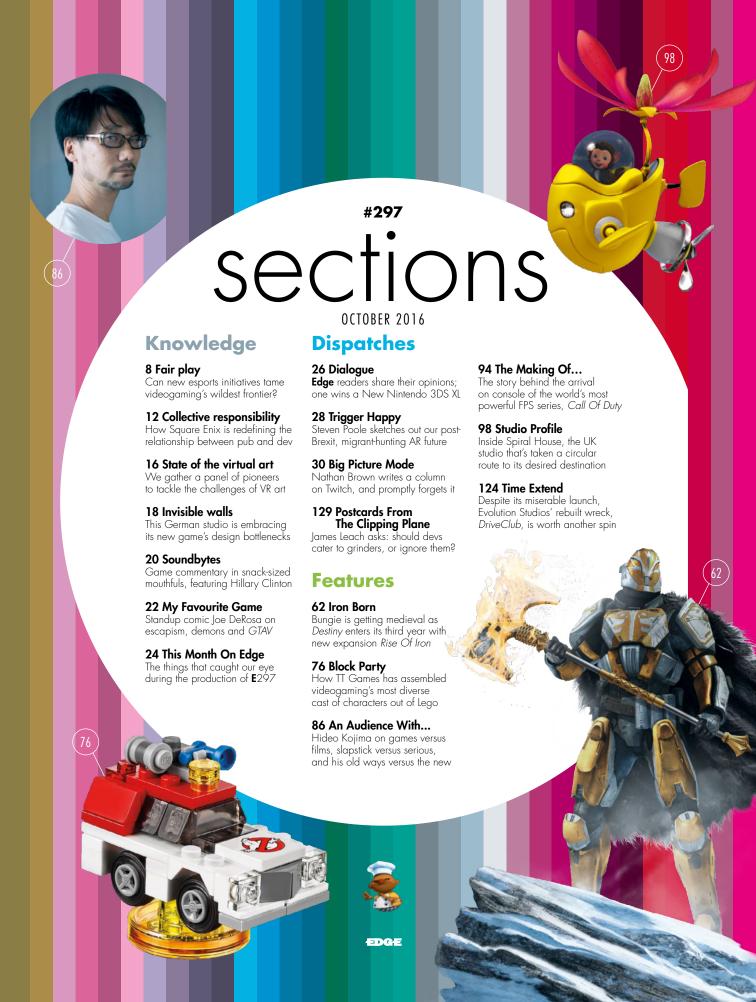
Explore the iPad edition of Edge for additional content



Follow these links throughout the magazine for more content online









FDITORIAL

Tony Mott editor in chief Nathan Brown deputy editor

Ben Maxwell writer Andrew Hind art editor

CONTRIBUTORS

Richard Cobbett, Elizabeth Elliott, Ian Evenden, James Leach, Emmanuel Pajón, Simon Parkin, Steven Poole, Chris Schilling, Edward Smith, Chris Thursten, Alvin Weetman, Alex Wiltshire

ADVERTISING

Steven Pyatt account manager (+44 (0)1225 687713 steven.pyatt@futurenet.com)

Michael Pyatt advertising manager Andrew Church advertising director

Clare Dove commercial sales director

CONTACT US

+44 (0)1225 442244 edge@futurenet.com

SUBSCRIPTIONS

UK reader order line and enquiries 0844 8482852
Overseas reader order line and enquiries +44 1604 250145
Online enquiries www.myfavouritemagazines.com
Email edge@myfavouritemagazines.co.uk

MARKETING

Sascha Kimmel marketing director Kristianne Stanton marketing manager

CIRCULATION

Juliette Winyard trade marketing manager (+44 (0)7551 150984)

LICENSING

Matt Ellis head of international licensing (matt.ellis@futurenet.com)
Tel: +44 (0)1225 442244 Fax (yes, really, fax): +44 (0)1225 732275

PRODUCTION & DISTRIBUTION

Mark Constance production manager Nola Cokely production controller Jo Gay ad production controller

MANAGEMENT

Matthew Pierce editorial director, games, photography, creative & design **Rodney Dive** group senior art editor **Joe McEvoy** managing director, magazine division

Printed in the UK by William Gibbons & Sons on behalf of Future. Distributed in the UK by Seymour Distribution Ltd, 2 East Poultry Avenue, London, EC1A 9PT (+44 (0)207 4294000). Overseas distribution by Seymour International.

All submissions to Edge are made on the basis of a licence to publish the submission in Edge magazine and its licensed editions worldwide. Any material submitted is sent at the owner's risk and, although every care is token, neither Future Publishing Limited nor its agents shall be liable for loss or damage. While we make every effort possible to ensure that everything we print is factually correct, we cannot be held responsible if factual errors occur. Please check any quoted prices and specs with your supplier before purchase. Small tip: if someone proposes a simultaneous deadline for a 132-page magazine and a 212-page special edition, do not say: "Sure thing!"

All contents copyright © 2016 Future Publishing Limited or published under licence. All rights reserved. No part of this magazine may be reproduced, stored, transmitted or used in any way without the prior written permission of the publisher.

Future Publishing Limited (company number 2008885) is registered in England and Wales. Registered office: Quay House, The Ambury, Bath BA1 1UA.

All information contained in this publication is for information only and is, as far as we are aware, correct at the time of going to press. Future cannot accept any exponsibility for errors or inaccuracies in such information. You are advised to contact manufacturers and retailers directly with regard to the price and other details of products or services referred to in this publication. Apps and websites mentioned in this publication are not under our control. We are not responsible for their contents or any changes or updates to them. If you submit unsolicited material to us, you automatically grant Future a licence to publish your submission in whole or in part in all editions of the magazine, including licensed editions worldwide and in any physical rehighting throughout the world. Any material you submit is sent at your risk and, although every care is taken, neither Future nor its employees, agents or subcontractors shall be liable for loss or damage.

Want to work for Future? Visit www.futurenet.com/jobs

Future, Quay House, The Ambury, Bath BA1 1UA United Kingdom Telephone: +44 (0)1225 442244 Fax: +44 (0)1225 732275



Future is an award-winning international media group and leading digital business. We reach more than 49 million international consumers a month and create world-class content and advertising solutions for passionate consumers online, on tablet & smartphone and in print.

Future plc is a public company quoted on the London Stock Exchange (symbol: FUTR). www.futureplc.com

6

Chief executive Zillah Byng-Maddick Non-executive chairman Peter Allen Chief financial officer Penny Ladkin-Brand

> Tel +44 (0)207 0424000 (London) Tel +44 (0)1225 442244 (Bath)



We are committed to only using magazine paper which is derived from well managed, certified forestry and chlorine-free manufacture. Future Publishing and its paper suppliers have been independently certified in accordance with the rules of the FSC (Forest Stewardship Council).





Specialist Magazine Of The Year



AVAILABLE FROM GAME & amazon.co.uk

















Fair play

Can new **esports initiatives** tame the videogame industry's wildest frontier?

"There's no centre

to the industry. It's

a series of islands

and some of them

are linked by

rickety bridges"

A fter years of being understood as a niche phenomenon within the game industry, professional gaming is now better understood as a new form of business entirely. Despite recent highprofile investments by major publishers – notably Activision and EA – a substantial amount of esports' growth has occurred outside the auspices of the companies that develop the games involved. This part of gaming culture was born with the player community, and the international showrunners that now dominate it – companies such as ESL, DreamHack,

Faceit and MIG – all originated outside of the traditional game development apparatus. If anything, Activision's recent acquisition of MIG demonstrates that gaming's traditional stakeholders have been pushed into a reactive posture by the rise of esports.

The ad-hoc and unplanned development of professional gaming has resulted in a diverse industry with dozens of points of internal division: philosophical, natural, personal, in terms of sponsorship models adopted, games played, and spectators attracted. In addition, esports is still struggling to find its place in the wider world. There is a strict generational gap between this new form of spectator sport and traditional sport, which impacts the way esports are reported on by traditional media (if they are at all) and the degree to which they're understood by traditional sporting organisations (if they are at all.) Even the

game industry, used to seeing itself as a young and misunderstood, is guilty of misunderstanding this younger form.

This is gaming's frontier, for better or worse. Esports' relative isolation and its lack of internal consensus, coupled with its stunning growth in popularity, makes it ripe for exploitation. Some of this is benign and carries the stamp of legitimacy – outside companies swooping in to 'own' parts of the scene.

In other cases, opportunism takes the form of corruption. In early 2015 Valve suspended five professional North

American Counter-Strike: Global Offensive players from team iBuypower for match fixing, along with the managers of their opponent, NetCodeGuides. Later the same year, CS:GO player Kory Friesen of team Cloud9 openly alleged in a YouTube

video that he and "everyone" in the professional Counter-Strike community abused the stimulant Adderall as a performance-enhancing drug.

Stories like this are becoming more common. In October 2015, authorities in Korea – where esports are far better established than in the west – made a series of shocking arrests of top-tier Starcraft II professionals who had also been found to be fixing the results of matches. Cheating and corruption are an international problem that affects every esport, a direct consequence of the organic growth of the industry and the lack of any form of central governing



Commissioner Ian Smith from ESIC, the new esports integrity initiative



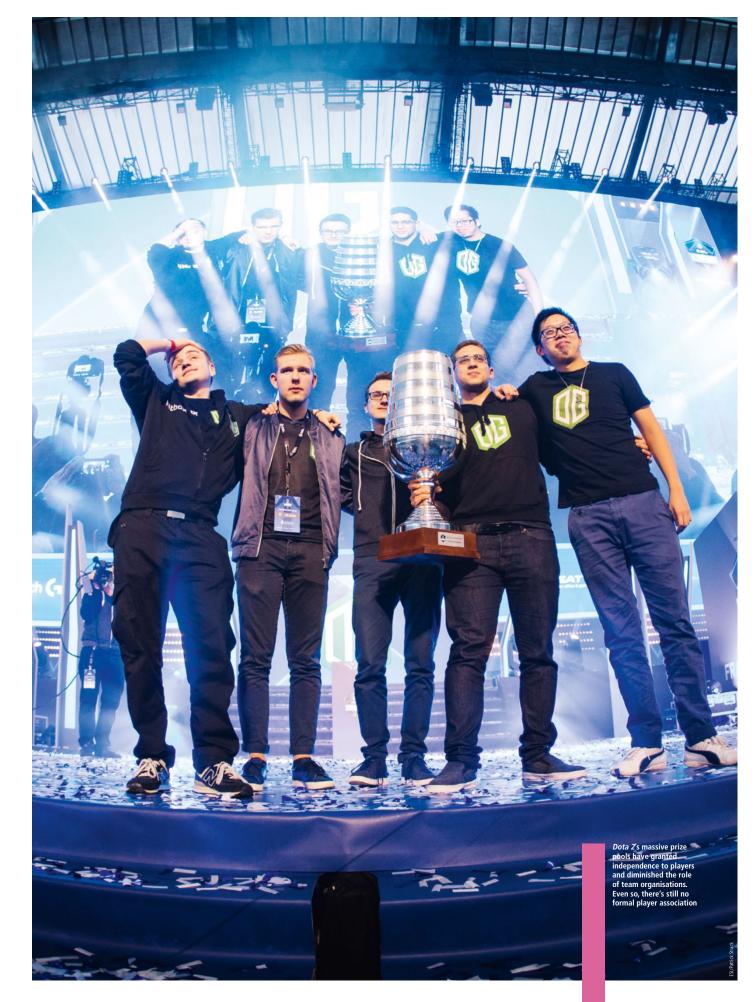
authority. "There's no centre to the industry," says **lan Smith**, commissioner of the new esports integrity initiative, ESIC. "It's a series of islands, and some of them are linked by rickety bridges and some are not at all. Some have lots of traffic between them and some have none."

Instability has a direct consequence for the esports industry's financial viability, Smith says. "If you look at the numbers and demographics in esports broadly, you would expect at this stage that esport would have about 30–40 per cent nonendemic sponsor inventory. Pretty highend stuff: Coke, Pepsi, Visa, Toyota – that level. But you don't see that, and across esports, the penetration of non-endemic sponsors is less than five per cent."

The principal sponsors of the majority of esports teams and leagues come from within the game industry: hardware manufacturers, retailers and so on. Even these have been stung from the lack of regulation within the scene: US PC hardware retailer iBuypower, for example, now has its brand directly associated with one of the largest scandals in North American Counter-Strike. For smaller companies within videogames, exposure to esports' large audiences is often deemed worth the risk. For non-endemic sponsors, it isn't.

"That level of sponsor has been stung in the last couple of years by scandals in football, athletics, tennis, you name it," Smith says. "More or less every sport has become risky in terms of brand management because of bad things."

This is a problem that the entire industry now has to face: they have



KNOWLEDGE ESPORTS





LEFT Esports events now regularly fill football stadiums and concert halls. The audience is enormous, but non-endemic sponsorship is notable for its absence. ABOVE The process by which players enter the scene is still highly informal, leaving them vulnerable to exploitation

the audiences, players and venues, but sponsorship is bottlenecked by a lack of structure. Esports governance itself now represents an opportunity to organisations with a stake in the business, and the past few months has seen a rush of initiatives intended to build consensus, centralise governance, and boost profitability.

The World Esports Association. WESA, was announced in May with an initial membership that included representatives from some of the most important stakeholders in Counter-Strike:

Global Offensive. Its founding commissioner. Pietro Fringuelli, is a lawyer with experience in media who has previously performed an advisory role for the German Bundesliga. WESA positions itself as a consensus-building body that seeks to establish

guidelines for the industry as a whole on matters ranging from consensus to dispute arbitration to player contracts. It's an ambitious remit, made practical by the organisation's initial emphasis on CS:GO alone.

Despite the need for better regulation, the organisation's announcement was met with controversy. Its membership included only one tournament organiser, ESL, raising questions about its effectiveness among the many other leagues involved in the CS:GO scene. Then, only days

after WESA's announcement, member team Faze left the organisation citing the lack of transparency surrounding WESA's methods. Since that time. WESA has communicated almost nothing about its ongoing work.

The rules-forming body ESIC, founded in July, has a more specific remit: anti-cheating and anti-corruption. Smith was formerly the legal director of the UK Professional Cricketers' Association, and has held roles within the Federation Of International Cricketers Associations and the Committee of UK

> Anti-Doping. He is sanauine about ESIC's chances of effecting positive change within the industry, but conscious that simply announcing an initiative is not enough.

"The first answer is for the industry to acknowledge the problem," he says.

"That big-picture issue still has a long way to go. There's still a fair amount of denial. There's also a sort of avoidance of the topic - people recognise that it's a problem, but there are so many problems, so many things to do, that this comes far lower down their priorities than it ought to."

For anti-cheating to be successful, Smith argues, the industry needs to work more closely with players. "You've got to educate the participants," he says. "By far the best deterrent to any kind of

RIOT POLICE

League Of Legends is one of the world's largest international esports, and it stands as the exception to the rule regarding the ad-hoc growth of the form. The game's developer, Riot, retains an enormou amount of control over the governance of the professional scene. Although it makes use of white label tournament showrunners from time to time, professional Leagu Of Legends tends to happen at Riot's discretion or not at all. League's relative stability has attracted higher-profile sponsorship than other esports. there's merit to the idea that a lack of governance is the main thing standing in the way of the industry's growth.

corrupt behaviour is education." It's here that esports encounters problems distinct from traditional sport. Many players and spectators are very young, and haven't grown up in a 'sporting' environment in any sense of that word. The most toxic tendencies of the gaming community directly impact esports' ability to be governed. "One thing that has struck me in contrast with my experience in traditional sport is the sheer virulence of social media and the chatter around esports," Smith says. "It's real WWE trash talk - but it's nastier than that, because at least WWE trash talk is part of the show."

Players' resistance to authority and preference for holding court on Reddit and Twitter is an obstacle that esports have yet to overcome. Maturity is needed, but this is a chicken-and-ega problem: without a player association to encourage a wiser culture, the culture isn't wise enough to produce a player association. In its absence, the role of governance falls to team organisations and leagues - and this, Smith argues,

"In every sport ever, over the past 200 years of modern sport, teams and leagues will tell you that they look after the players and look out for their best interests," he says. "It's the biggest lie ever. Their interests totally conflict. The teams need the players, and it's far, far better if [they've] got those players where they're unrepresented collectively."

Integrity is this new industry's biggest challenge, a corner that needs to be collectively turned. This will take a cultural sea change - one that experienced outsiders can foster, but not force. For players, the stakes are high. The success of initiatives such as ESIC and WESA is dependent on their willingness to help themselves. "At the end of the day," Smith says, "the rules are for them. Let's say there was a major fixing scandal in Dota 2, and Dota 2 dies as an esport. Does this affect DreamHack? Well, a little bit. Does Valve die? No. So who does it register with? Who dies along with [professional] Dota 2? Dota 2 players."

10 **EDGE**

"One thing that

has struck me

in contrast with

traditional sport is

the sheer virulence

of social media"





Collective responsibility

Square Enix is changing the rules between devs and publishers by involving the crowd

Three years since its inception, Square Enix's Collective initiative has hit the \$1 m milestone in money raised through Kickstarter. This year, it has already published moody point-and-click adventure *Goetia*, with two more games to come before December. Each month, it attracts more pitches from independent developers than it can accommodate. Its success so far is a validation of the efforts of one man: the Collective's creator and project lead **Phil Elliott**.

The first seeds were planted when Yosuke Matsuda took over from Yoichi Wada as president of Square Enix. "He had a series of things he was interested in looking into more," Elliott tells us. "One of them was: how do we empower our community more in publishing decisions? Others included a general interest in crowdfunding and supporting new talent, building relationships, thinking about the health of the industry and supporting creativity." At the time, Elliott was the publisher's head of community - a role he retains today - and, as such, it landed on his desk. He began to spitball concepts, wondering if there was a way Matsuda's ideas could somehow be combined. "I avess I wanted to find something that would make it really beneficial for teams to be able to work with us," he says. "You know, we're a big publisher - can we open up the scale of that publishing business? It costs us very little to do that, and we can perhaps allow other teams to benefit from those results."

Elliott sounded out a number of contacts he'd made within the development community as a journalist for feedback. "They were mercilessly



Square Enix Collective creator and project lead Phil Elliott

honest!" he recalls. "But they really helped me shape what was a good approach versus what was perhaps an obvious approach. Very quickly we came to the decision that we didn't want to do something that would just be a good one-line sales pitch. We didn't want to do it for marketing reasons. We wanted to set out with the philosophy of trying to be beneficial, and with the mindset that anything else can change apart from that."

"We're a big

publisher – can we

open up the scale

of that publishing

business? It costs

us very little"

That was around three years ago, and the first part of the process was launching a feedback platform on the Collective website – a place for developers to submit pitches, with the understanding that Square Enix would then drive traffic from its existing community so that they could vote on whether or not they would be keen to support that game through

support that game through crowdfunding. The community would also be invited to leave more general feedback about what they liked and didn't like about the pitch. "The idea behind that first phase was to help teams build up more momentum before starting a crowdfunding [campaign], because at that time we saw a lot of teams going into Kickstarter and Indiegogo pretty cold. Because crowdfunding is such a psychological process, they go in cold, they don't do anything in the first few days, the trajectory is [heading towards] failure, and it's very hard to come back from

there. So we wanted to try to see if we could do something about that."

At the time of writing, the Collective has published a little over 100 pitches on its feedback platform. Each pitch gets on average around 20,000 views, an order of magnitude more than any featured game would ordinarily have seen prior to that. "Sometimes developers run [Steam] Greenlight campaigns in parallel, which is cool," Elliott says. "And then for some of those teams – depending on [our] capacity and also if they request it – we'll possibly work with them on

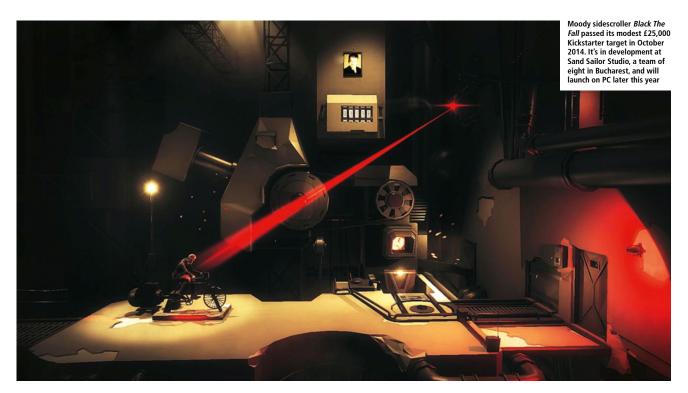
supporting a crowdfunding campaign directly."

First, that involves some due diligence on the part of the publisher, a process Elliott says is surprisingly time-consuming. "We look into their experience, try to get a feel for their passion and dedication, and make sure they know what it's going to take to put their

particular game together," he says. "We obviously tend to check that with folks from inside our dev studios and our business, and that allows us to then officially endorse a campaign."

The benefits to a small team are obvious. Having a well-known publisher on board makes it easier to spread the word. It can send emails to its huge fanbase, communicate with the press, post to its official blog, and use its social channels to expose a game to a much wider audience. "Crowdfunding, by and large, is a numbers game," Elliott says. ▶









"The developer always keeps creative control," Elliott says, "and always keeps IP." ABOVE Sushee's Goetia. RIGHT Sci-fi adventure The Turing Test, from the team behind Pneuma: Breath Of Life



SQUARE NUMBERS Elliott talks figures – and is refreshingly



For campaigns that it supports through Kickstarter, Square Enix asks for five per cent of net funds raised. This goes towards the costs of the due diligence process. A baseline marketing investment is around \$100,000, which Square Enix would look to recoup in a 70/30 share with the developer. Thereafter, ten per cent of Square Enix's revenue goes to its advertising partner, US creative agency Petrol. Any profits raised are invested back into the Collective. "For us, it's not about money," Elliott says. "It's about building relationships and trying to find new talent, either for us to work with or just to help people get from the first rung to the second rung of the ladder."

KNOWLEDGE THE COLLECTIVE

"Very simply, the more awareness you have, the greater your chances of success. Not every time, but that's the overriding factor."

Naturally, this requires a few things in return. The Collective will only support a campaign if a game has been through the feedback process first. The studio will also have to fill in a questionnaire, which asks about experience, licences, staffing, a game design overview and, significantly, a weekly production schedule through to release. "Basically, we try to get as much [information] as possible," Elliott tells us. "Now sometimes I'm pretty sure teams won't have a weekly production schedule through to launch. They may not have really thought that through at that point. So [by asking for that] we're trying to make sure they're as clear as possible about what they need."

Currently, there are limits to how many projects the Collective can take on, and while it's clearly something that frustrates Elliott, he's mindful of resources being stretched beyond capacity. The current schedule for the feedback site allows one pitch per week, with a break for Christmas, which equates

containeds, which equales to around 45 campaigns per year. On the crowdfunding side, because it's more time- and resource-intensive for the publisher, the initiative can only support around seven or eight per year. "There is a bit of a funnel there, and we can't perhaps be quite as agile or flexible [as

we'd like]," he tells us. "At the moment, for example, we're booked up until October. And that's a shame, but where the crowdfunding campaigns come in, that's where people are backing real money, so we can't compromise and speed up the process just for the sake of having more people in. Capacity-wise, we're very mindful of discoverability, and because that means curation is important, I think one per week is the right amount."

Demand has increased over time, such that the Collective only accepts submissions for two days each month. And from those, only a select few are hosted on the site. Elliott accepts that the nature of Square Enix's fanbase means there's a certain inevitability about the games that tend to do well, though his aim is to be in a position where it can realistically support any game in any genre. "I think as we grow, we will break out of that," he says. "I definitely don't want to go down a path where I'm looking at a pitch and saying, 'Yeah, that one's a slam-dunk because it's a IRPG, so let's go with that one.' For me, that's counter-intuitive to what we're trying to do. My aim is to be genre-agnostic and also region-agnostic – so far the teams we've supported have come from the US, Canada, the UK, France, Germany, Romania, Japan, Spain... I want us to be able to work with anybody, anywhere."

How, then, does he see the Collective growing in the coming years? "I hope what'll happen is that as more people understand what we're doing, we may have the potential to help teams raise bigger amounts," Elliott says. But I think the main growth you'll see from us in the next year or two is where we're publishing games and working with

teams to help them get the best sales results possible." That process has already begun with the April release of *Goetia*, which Square Enix will continue to support in the coming months: it made an appearance at San Diego Comic-Con, and will be on the publisher's stand at Gamescom. Beyond that,

there's firstperson puzzler The Turing Test (due this month), with dystopian adventure Black The Fall and anime detective story Tokyo Dark slated for 2016, too.

These are busy times for Elliott and his small team, then, but he's relishing the challenge, and is unswerving in his belief that the Collective is a genuine force for good. Playing devil's advocate, we suggest that it may look to some like Square Enix stands to risk very little and gain much from the deals its strikes (see 'Square numbers' for a breakdown of the figures). His response is surprisingly forthright. "I completely understand that



The Collective found a success in *Tokyo Dark*, which aims to meld western point-and-click mechanics with a narrative inspired by Japanese visual novels

view," he says. "That was my expectation when we first announced [the initiative]. People should be cynical about this. They should be cynical about companies messing around with the indie [sector] and crowdfunding, because it's very important for the future of the industry."



Elliott is hopeful that over time the Collective will prove its intentions and its value to doubters but, more specifically, he's keen it will be beneficial to the crowdfunding ecosystem. "I remember when people started first getting into it, and it felt great," he says. "Sure, it was a bit Wild West, but it felt like you were there and along with the developer for a ride. Recently, people have become a bit disillusioned with some things. We can't make crowdfunding 100 per cent safe, but we want to try to take as much risk out of it as possible. I think it's vital that there's this independent source of funding that enables teams to actually go out there and take risks and do things that investors and publishers don't necessarily see the value in. And it's important for us all to find good solutions to building that trust between backers and creators."

14 EDGE

"We can't make

crowdfunding 100

per cent safe, but

we want to try to

take out as much

risk as possible"



VOTING OPENS 1 **SEPTEMBER** 2016



State of the virtual art

At this year's Develop, we asked three VR pioneers to tackle the issues facing visual design in this new medium

Cathered for the Edge panel entitled Next-Generation Visuals: Creating Art For VR, leading developers joined us at Develop in July to discuss the challenges facing artists working with virtual reality. In this edited transcript, SIE London Studio executive producer of VR Brynley Gibson, Rebellion head of digital Matt Jeffery, and Guerrilla Games Cambridge principal artist Shawn Spetch consider the potential and pitfalls.

What challenges face developers creating art assets for VR games?

Shawn Spetch We now have to think about things in terms of performance. So instead of just building a game like *Killzone Shadow Fall*, where we populate levels with a lot of detail.

we have to scale that and we test performance while going into production.
We optimise while we're working, instead of putting a bunch of stuff in and then going backwards to make sure it fits into the framerate – framerate is the most important thing for us right now. We've had to rethink so many aspects – we use be

so many aspects – we use bold shapes, we make sure it's readable, and we focus on believability.

How do those aspects marry up?

Brynley Gibson At London Studio, we talk about believability over realism always. So even though we use kind-of-realistic textures, it's all about the shapes and we don't go for lots of high detail. Battlezone's a great example where you've got solid shapes, but it's a style that doesn't have a lot of noise in it – it helps people to not be overcome or bewildered as they move their heads

around. Detail is not necessarily needed for great, believable VR experiences. Matt Jeffery VR should be a wonderful experience for everyone. We know that there's a small percentage of the population who will always get motion sickness whatever we do. But for the vast majority, trying to make the experience as comfortable as possible is very important. SS We're always trying to beat that 60fps because you have to in VR there's no way that you can drop frames. There's not much of a division between design and art now - we actually work together as a unit to make sure that it's all running within the performance target and we check GPU all the time. MJ It's like Fight Club: the first rule is

framerate, and the second rule is still framerate.

How will this change in the future?

BG We have to be cautious about this; we've found when we've done tests and ramped up the resolution and textures, it doesn't make great VR. You think, "Oh, it will

be brilliant, it will be crystal," but it's definitely not right. It's about picking the right art style for your game, but also for VR. And there are many ways that you can do that – it doesn't mean that it all has to be arcade-style. We've all been trying out different things, and that will continue for the next few years. And I think a language will develop.

55 Some of the things we've tackled include reducing surface detail on textures. We watch our highs and lows, our darks and lights, as well. For example, blacks are not always the best thing to use because they're harder to







FROM TOP SIE London executive producer of VR Brynley Gibson; Rebellion head of digital Matt Jeffery; Guerrilla Games Cambridge principal artist Shawn Spetch

read – players can perceive them as a hole in the environment, or they might not be able to sense the specific depth between them and that area.

MJ When we make our more traditional games, like Sniper Elite, a lot of it is pushing the GPU as hard as we can. To use a bad analogy, you dial everything up to 11. When we did our first VR prototypes we did the same, and then when we put on our headsets it was overwhelming. It's too much, and your

Will there always be a compromise?

brain doesn't like it.

55 We're trying to push a photorealistic look for *RIGS*. For example, the sand in our Dubai map has a lot of visual detail in terms of [the grains'] waviness, but we use an inverse detail map in the shader, almost like a set range, where we're drawing detail farther away from the player, and less when they're close.

Polygons are probably our biggest budget consideration right now, so we're trying to figure out ways to drop counts – reverse LODs are something we're looking at. We take the fourth – or last – LOD and work backwards, which is different from just making a model in ZBrush and then decimating it. So we put that LOD in the map, and then look at the form and silhouette.

The reason we do this is that with the head-mounted display, the LODs tend to drop off with the field of view really quickly. That's going to be representative of the distance that you're going to be drawing most of the time. From there we can upscale and do the rest of the LODs down. As time goes on, you're going to see techniques like that being done across the board, and people trying different things, and it's just going to make things smoother.

16 EDGE

"When we've

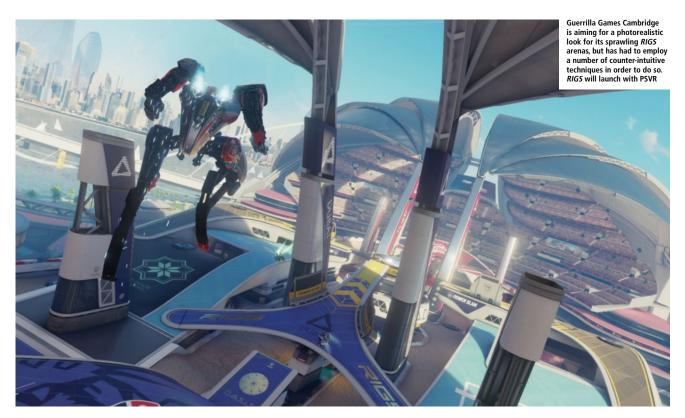
ramped up the

resolution and

textures, it doesn't

make great VR. It's

definitely not right"





ABOVE + RIGHT "I think we'll see players becoming acclimatised to VR, so they'll be able to take more," says Gibson, who's working on *PlayStation VR Worlds*. "There's a limit to that, but it will grow"





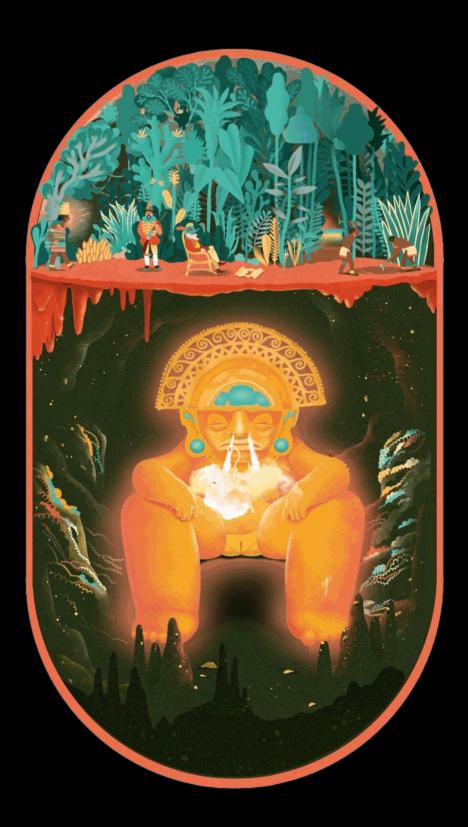
THE EYES HAVE IT Optical tracking could take VR



While GPUs are becoming more powerful, optimisation remains a focus for developers working with VR, and there are a number of exciting new technologies set to help. "One of the things that could be potentially the next step in VR is optical tracking," Spetch says. "The player looks in a direction and we can draw the detail in the environment [at that point] at a high resolution because we're focusing on the specific position of the eye, and we can LOD that out when they look away. That's one of the opportunities we have to really push the technology forward – it'll be interesting to see what happens."

Impossible Bottles looks fantastic in stills, but even better in motion. You can see gifs at Honig's site, www. honigstudios.com





INVISIBLE VVALLS

Why a German studio is embracing bottlenecks in its game's design

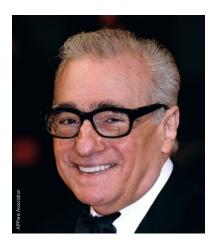
Impossible Bottles is a collaboration between Berlin-based multimedia production company Honig Studios and artist and illustrator Rafael Varona, who lives in Amsterdam. The latter's Impossible Bottles illustration project inspired the studio to approach him, and now the group is pulling together a striking-looking iOS puzzle game. "Impossible Bottles is a combination of themes, topics and techniques we're excited about," Honig co-founder and technical designer Jiannis Sotiropoulos tells us. "Mad scientists working in solitude; enormous golems existing in eternal movement; perfect loops and humorous animations and situations the player discovers if they look carefully."

Players will control a tiny scientist who must bring equilibrium to the workings of a series of incredible machines that have gone off-kilter. "The game starts with a malfunctioning robot which the player needs to repair to restore harmony to the world above," Sotiropoulos says. "The player will have to come to understand the mechanical functionality of the robot by interacting with the lab environment in order to make the robot move in a perfect, harmonious loop."

Honig plans to release a beta version in January 2017, with the full launch following in April.

Soundbytes

Game commentary in snack-sized mouthfuls



"I wasn't so enthused...
It's taken me years and
years to catch up with
them, and it's because
I didn't like these
goofy games."

Spielberg and Lucas always loved tech, while **Martin Scorsese** couldn't see the point, which he reckons left him in their wake



"We think having a new machine coming is going to help the industry to continue to grow and to take a lot more casual players back to the industry."

Yves "The GamePad can be as revolutionary as the Wiimote" Guillemot bigs up NX. We hope he's right



"You have three choices: you can spend your own money, you can lie, or you can do what you're told. And, generally, we've always chosen that we'll just do what we're told..."

Feargus Urquhart paints a depressing picture of work-for-hire life at Obsidian

"I don't know who created Pokémon
Go but I'm trying to figure out how we get them to Pokémon Go to the polls!"

United States Of America presidential hopeful **Hillary Clinton** gets her "How do you do, fellow kids?" moment out of the way nice and early



ARCADE WATCH

Keeping an eye on the coin-op gaming scene



Game Mech Mayhem/Rift Heroes Manufacturer Fireshark Studios

Large-scale 'interactive theatres' are becoming an increasingly common sight in locations able to accommodate them, and usually allow a group of lightgun-armed players to cooperate against a common enemy, sometimes buffeted by haptic feedback. But Kansas-based Fireshark Studios is taking a slightly different tack with its Fireshark Theater, which swaps lightguns for modified Xbox 360 controllers. Sixteen players (only eight of whom are afforded a seat) can compete in teams or all-out deathmatches in its launch games. In Mech Mayhem, players choose from seven mechs, each with four unique abilities, and then do battle in Free For All or Capture The Flag modes. Rift Heroes, meanwhile, is a Smash Bros-style brawler that offers eight characters; deathmatch, team deathmatch and dominion modes; and league and tournament play. The 20'x8' enclosure uses projection mapping to turn its angled walls and floor into a giant screen, while scoreboards sit on either side of the players. While Mech Mayhem's top-down action looks good on the wraparound screen, Rift Heroes' side-on arena takes on a three-dimensional form that attempts to make you feel like you're floating in space in front of it. Fireshark Theater is in select US arcades now, with more games to follow in future.





Which is the odd one out?
Hero's Duty, Sugar
Rush, Fix-It Felix, Call
Of Honour

Take the smart movie quiz...

www.gamesradar.com/new-totalfilm-quiz

My Favourite Game Joe DeRosa

The US standup on videogame escapism, fighting demons, and how Amy Schumer's mum helped land him a role in GTAV

Standup comedian Joe DeRosa is also an actor who's appeared in TV shows including Better Call Saul, Inside Amy Schumer, Louie and Bored To Death. Grand Theft Auto V players will also recognise him from his voice work in Rockstar's game, as sleazy Hollywood agent Rufus Bellows.

How did the GTA role come about?

There was a national radio show called Opie And Anthony, and I was one of the regular guests. Lazlow [Jones, Rockstar producer and writer, director and talkshow host] was a big fan of the show. I ended up meeting him at a barbecue at Amy Schumer's mum's house on July 4, years before Amy was the most famous person in the world. And he goes, "Hey, man, I like you on the show. Why don't you come by, and we can get you in Grand Theft Auto V?" And I was like, "Er, yeah..." trying to play it really cool while inside I was freaking out.

How did it go?

We had a lunch meeting and he said he was thinking I could be one of the DJs on the radio stations. So I went in and had to sign all these papers to say I wouldn't speak of anything I saw within the walls of Rockstar Games. Then they told me they had to fit this thing on my head and put this light in my face and all this stuff. And I was like, "Sorry, what's happening?" And they said they had to capture my face for the game. It was like showing up to be a Storm Trooper in Star Wars and then being told to take the mask off and being given lines: "Here's Luke – just stand next to him!"

FRINGE BENEFITS

Alongside his TV work, DeRosa has also appeared in a number of short films and was a writer on comedy documentary Women Aren't Funny. DeRosa hosts the We'll See You In Hell podcast on Fangoria Network, and recently launched a horror column called Some Severe Situations on fangoria. com. He's been performing as a standup comic for more than a decade, and will make his Edinburgh debut this **Zero Forward Progress** (bit.ly/joederosa).

Were you already a fan of the series?

I remember playing the original ones in college, and they reminded me of this game called APB that I used to play in the arcade as a kid. But I'd never felt as immersed in a game before GTAIII.

You're a fan of horror and sciencefiction – is that reflected in the games you're drawn towards?

I'm a big fan of Stephen King, Richard Matheson, Harlan Ellison and writers like that, and I'm a huge horror movie fan. So, yeah, that affects the videogames I play 110 per cent. I'm playing the new Doom right now, and it's

"I hate the Fallout

games - they're

I don't want to

collecting cans"

walk around

masterpieces, but

great – I love fighting demons and anything with monsters in it. I was really disappointed when the new *Silent Hill* never materialised! And I really like ultraviolent games like *Ninja Gaiden 2*. I'm not looking for violence, but

an escape – it's dumb fun. I want to jump in, enjoy fast and furious action, and then get out again. I hate the Fallout games – they're masterpieces, but I don't want to walk around a wasteland collecting cans. I have an old-school mentality – a very arcade-centric mentality. And for some reason the games that capture that best for me are usually horror or stuff like Gears Of War and God Of War. I'm like, "Just tell me who I am and let's go!"

the sweet spot when the game came out. I remember my cousin bringing me to the arcade to show me it for the first time. The whole time before we got there I was like, "Street Fighter is one of the worst games I've played – there's no way this game is going to be good." And he's like, "Trust me!" And, of course, when we got there the line was practically out of the door to play it, and it was mind blowing. But Mortal Kombat reeled me in because of the gore, and the fact that Liu Kang seemed to be modelled quite intentionally after Bruce Lee. Mortal

every kid was. I'm 38, so I was right in

Kombat was the reason I got a Genesis instead of Super Nintendo, because Genesis had the blood code... I was like, "Fuck you, Nintendo, I'm 14!"

And which game is your absolute favourite? Resident Evil 4. I was

one of the ten people who chose to buy GameCube over PlayStation, and it was an exclusive that came out when a lot of people were talking shit about the console. It was like, "Fuck you - we got one!" I was really mad when they ported it to PlayStation [laughs]. I'd never been a huge fan of the series - it was a little too slow for me. So I just bought it because it was an exclusive, not expecting much, and within ten minutes of playing I was like, "This is amazing." It balanced action, story and puzzlesolving better than any game I've ever played, and it's one of the few games I've revisited multiple times.



You mention Mortal Kombat in one of your standup routines – have you followed the fighting-game scene?

I was obsessed with Street Fighter II, as



Aric's World
www.bit.ly/aricsworld
Veteran LucasArts creative Aric
Wilmunder (known as SCUMM
Lord to his colleagues at the
time because of his key role in
the engine's evolution) has a
stack of design documents
from the studio's golden era
and has started to release a
few each month on his site.
The collection of expansive
outlines for all manner of
classic (and not so classic)
games is a treasure trove for
anyone who grew up playing
adventure games in the '90s. It
reaches back farther, however,
to 1985's The Eidolon and the
following year's Labyrinth: The
Computer Game. There's also
an ever-so-slightly different
version of the Maniac Mansion
document co-creator Ron
Gilbert recently published, an
uncredited Star Trek SCUMM
game, and a circuitous link to
the design document of the
never-released Indiana Jones
And The Iron Phoenix.



WEB GAME

WEB GAME
Lost Ethereal
www.bit.ly/lostethereal
Made by Eric Howard and
Christian Masse for the Low
Res Jam, which took place
earlier this year, Lost Ethereal
is an enigmatic, somewhat
creepy shortform adventure.
Jam participants were free to
use any programming platform
they wanted, and as few or as
many colours, and even 3D
graphics if they felt particularly
ambitious – the only
stipulation was that entries
must fit into a 64x64-pixel
resolution. Despite the
diminutive real estate,
Lost Ethereal somehow
manages to feel epic thanks
to its inscrutable creature
designs and unnerving,
minimalist soundtrack.

VIDEO
Otaku clip
www.bit.ly/otakudoc
This ten-minute excerpt from
French documentary Otaku
is a nostalgic look back at a
mid-'90s Nintendo enjoying an
incredible wave of SNES-based
success. The segment opens
with an interview with former
managing director Hiroshi
Imanishi who, while cheerfully
puffing on a cigarette in his
boardroom, talks the
interviewer through the history
of the company. Then there's a
brief chat with NES designer
Masayuki Uemura, who
explains what a console is,
followed by footage of a Mario
and Super Scope playtest,
performed by a game tester in
shirt and tie and overseen by a
still-smoking Imanishi. But the
highlight is a stroll through the
development floor, including a
stop at the desk of a 40-yearold Shigeru Miyamoto,
complete with blonde
Telecaster and CRT screen
running Super Mario All-Stars.



THIS MONTH ON EDG

HARDWARE

Nintendo Classic Mini: NES

www.bit.ly/classic minines

Not to be outdone by Microsoft's Xbox One S, Nintendo has
announced a slimline revision of its NES, a scant three decades
after the classic console's European launch. Nintendo Classic Mini:
Nintendo Entertainment System is a cut-down replica of the original,
with matching controller, which can be hooked up to your TV via
HDMI and is powered via a USB cable (though a close scan of the
fine print reveals that, in characteristic Nintendo style, a required
mains adaptor for the other end of the lead will not be supplied in
the box). The hardware won't accept cartridges, nor can it be
updated, but it does come loaded with 30 games, including Metroid,
Super Mario Bros and The Legend Of Zelda. At £50 — the cost of
just one premium NES title back in the day — it's not a bad deal.



Go outside

It turns out there's sunshine beyond our blinds. Who knew?

Unreal production

Bing Yang's Lost Soul Aside is an astonishing solo work

Vita signs

If Sony won't support it, perhaps the homebrew community will step up

Social DevelopHello to all who dropped
by to see us in Brighton!

Go carefully
But also ne'er-do-wells
and a great deal of
potential accidents

No No Man's Sky

Despite going gold, the review code got lost in the galaxy somewhere

And beyond?

Disney Infinity faces
a slow death over

Develop ailments Two days of handshakes = one awful lurgy attack

TWEETS

Ed Vaizey was actually a decent minister. He even pretended to like videogames, which was appreciated. **Tom Watson** @tom_watson Labour Party deputy leader

play videogames :(**Evan Edinger** @EvanEdinger YouTuber

Just to be clear, "I was looking for a Pokestop" is not an acceptable reason for being on the roof of a shop with a crowbar at 2am! **Stirling Police** @StirlingPol Law enforcers

We've spent years filling No Man's Sky with surprises. You've spent years waitin Please don't spoil it for yourself :(Sean Murray @NoMansSky Managing director, Hello Games



Follow Edge on Twitter



AN EDGE SPECIAL EDITION











FEATURING 212 PAGES OF INCREDIBLE PIXEL ART, AND EXCLUSIVE INTERVIEWS WITH LEADING ARTISTS INCLUDING VIC NGUYEN, JUNKBOY AND OCTAVI NAVARRO

AT NEWSAGENTS NOW OR BUY ONLINE:

myfavouritemagazines.co.uk/edge

DISPATCHES OCTOBER



Issue 296

Dialogue

Send your views, using 'Dialogue' as the subject line, to edge@futurenet.com. Our letter of the month wins a New Nintendo 3DS XL, supplied by the Nintendo UK store



The outdoor type

Games condition you to look at the world differently. You boot up *Call Of Duty*, see a man running, and shoot him. You run around the streets of an *Assassin's Creed* game and instinctively look for window frames to use as footholds. In, well, every Naughty Dog game made in the past decade, you see a yellow ledge and know for sure it's the way forward.

It's simple psychology that doesn't of urg transfer over to the real world. I don't walk the streets looking for buildings to clamber up. But while immersed in these digital spaces I use the tools I'm given, and those tools force me to look at otherwise unremarkable, everyday objects and items in a completely new way — so forgive me for being amazed that this has happened with Pokémon Go.

A water fountain near my place of work is a Pokéstop, and whenever a Lure is placed, it's an event. People crowd around the benches, sit on the nearby grass, all with phones out, flicking their screens in the hope of catching a few

Pokémon. It's a real-life location, just a water fountain, but to others it is suddenly so much more than that.

Pokémon Go has changed my life in tiny, potentially significant ways. I walk the long way through town to maximise the Pokéstops I pass. I rarely have my phone in my pocket while walking. I look at the world around me in a slightly different way.

Is this a good or bad thing? I've absolutely no clue. But one thing's for certain: *Pokémon Go* has blurred the lines for me when it comes to real and digital spaces, and if nothing else, that's pretty incredible.

Dave Aubrey

It's also blurred the vision of riders on a local cycle path, much to one **Edge** staffer's chagrin. Everybody be safe out there — and

if you see a 260CP Drowzee guarding a gym, please leave the poor thing be. We need all the coins we can get right now.

Into your arms

my life. Is this

a good thing?

I've absolutely

no clue"

Completing *Uncharted 4* led me to replay a very different game in which climbing is a core mechanic: *Shadow Of The Colossus*. It could be argued that the latter more consistently succeeds in conveying the sense of urgency and desperation a person might experience when scaling death-defying heights. *SOTC* achieves this by encouraging the player to feel just as edgy as the protagonist, aided by its control scheme.

Most notable is the requirement to press

R1 to grip and hold on to ledges as well as the titular creatures. Initially seeming inconvenient by today's standards, this feature cleverly mimics what anyone would do if faced with the challenge of clambering up these fearsome beings: cling on for dear life. In contrast, in *Uncharted* you could leave Drake hanging off a ledge to take a phone call, make lunch and walk the dog, only to find him still

dangling over that fatal precipice when you return. As Drake scales his umpteenth ancient ruin he may appear to break a sweat, but the player rarely does. It follows that *Colossus* demands the unbroken attention and engagement of the player for successful progress to be made. It is a reminder that immersion in the world a game presents is developed through realistic interactivity, no matter how fantastical the setting.

Colossus also takes the risk of handing the player control of a protagonist who moves unpredictably. Yet Wander's fumbling echoes the player's trepidation and awe when faced with these imposing creatures. It serves to communicate the scale of the colossi, and the challenge of felling them.

This correlation between player emotion and onscreen action is therefore encouraged



through the game's controls, rather than contradicted by them. It's a reminder that games can enhance immersion when offering bespoke methods of interaction. The future looks bright, however: the rise of VR will surely stimulate greater parity between protagonist and player in this most enthralling of mediums.

Daniel Howie

Absolutely — and *The Last Guardian*'s Trico feels similarly unpredictable. For the game's sake we prefer disobedience to be the exception rather than the rule, however.

Down about it

As a Brazilian kid, my history with consoles and games is a little bit different. Consoles came here years after their releases in places like the US, Europe and Asia — and when they finally arrived, insane prices relegated them to an affluent part of the population, or fomented piracy.

Cut to the 21st century: a broadband connection, streaming, online play and a game market many times bigger. Things are much better now, graphics are just amazing, and games have become more and more complex. There's never been a better time to be a player.

Two things worry me, however. First, the fact that the current consoles have basically the same specs. In PS4 and Xbox One, Sony and Microsoft released twin consoles, with minimal differences (OS; UI; fewer FLOPS here, a few more there). In the old days, we knew why we chose one console over another: the games. But now exclusivity is just a matter of time. The new consoles have a lot of power, but as time goes by, they lose a little of their charm.

I'm also worried about the way the industry seems to want to change the concept of generations in this market, releasing a better version of their current consoles a couple of years after launch. Analysing their specs, I really doubt that it will be worth it for existing owners to

change. This 'hardware-DLC' approach has me wondering if, before too long, playing videogames in Brazil will be just hard as it was when I was a kid.

Pablo Martins Balieiro

Microsoft set these wheels in motion some time ago — compare Xbox 360's launch interface and the cluttered mess it ended its life with. Iterative hardware refreshes are the next logical step. It could be worse: Brazil could be throwing its economy into the toilet. Which brings us to our next letter.

The great big no

The last thing anyone wants to deal with in a magazine devoted to a shared love of videogames is an analysis of the most recent of England's civil wars. The EU referendum split the country; we descended into bitterly polarised factions so disillusioned with one another that communication, let alone civil discourse, was all but impossible. In the end, Leave prevailed; what's done is done, I guess, leaving us to deal with a nasty little beast called reality — the very thing gamers come to a place like **Edge** to escape. Sorry.

The UK is almost certainly going to exit the EU and whether you are for or against that momentous decision, we are all going to have to live with the consequences. Let's cut to the chase: are things going to get more expensive for gamers? The answer is that in the immediate future, no; in the short term, yes; and in the long term, yes, though with less severity as time goes on.

Before long the UK will leave the EU and can begin the process of renegotiating trade deals with Europe and the rest of the world. This will take years. During this transitional period the UK will rely on the World Trade Organisation to protect its interests, and the WTO has been quite clear that the UK will be granted 'third country' status from the point at which it leaves the EU until it renegotiates trade deals. Here, 'most favoured nation' status, or MFN, comes into play. The MFN tariff for videogames in the UK is

currently set at zero per cent. The global rate for import duty on videogames is 6.2 per cent, but varies from zero up to 40 per cent. Sales tax, or VAT if you prefer, is added on top of this figure. The UK's post-Brexit, third-country status frees nations from the stipulations of MFN and, as such, they can slap a few extra tariffs on top of the price of the disc — as, of course, could a cash-strapped UK government.

It's not just games, either. Back in 2015, the WTO added over 200 products to the Information Technology Agreement list of zero-tariff and free-trade goods, a list that included game consoles, next-generation superconductors, computer software, GPS devices and, oh god, ink cartridges. In total, \$1 trillion of goods had tariffs removed. Such an agreement will not apply to the UK during the interim period, with predictable results: we'll have to fork out more than our European neighbours. Probably a lot more.

I know people are tired of doom and gloom, but the problem with the future is that sooner or later it happens. The WTO, before the vote, warned of 'tortuous talks'. and said Brexit was liable to cost consumers £9 billion a year in increased duties. And that's after the major deals have been concluded; you can bet your Hello Kitty Dreamcast that the consumer electronics industry will be centre stage when the tariffs begin to mount up. Our already expensive hobby could, and probably will, become way more expensive, and many of us will have to anxiously hope that the British government is up to the challenge of renegotiating with all 161 WTO members in a timely fashion. If not, our PS5s, and PS6es for that matter, are going to be about as affordable as a holiday bought using the post-Brexit British pound.

Ian Jackson

Thank you, Ian, for explaining a few things that hadn't been clear. Let us know where you'd like your New 3DS XL sent. In the meantime, if anyone needs us, we'll be in the pub. We may be some time. ■

DISPATCHES PERSPECTIVE



STEVEN POOLE

Trigger Happy

Shoot first, ask questions later

In the new sovereign utopia that is post-EU Britain, adults and children alike are going nuts for the latest craze, *Pokémon Go Home*. We took back control of our borders; now *Pokémon Go Home* lets everyone help in the democratic task of sending migrants back where they came from.

Using robust profiling algorithms and your smartphone's camera, the game has you search for migrants in streets, parks and cafés. With its deep-learning tech, Pokémon Go Home simplifies the task of the vigilante, who may not be able to tell at first glance who is a migrant and who isn't. After all, a Pole might well speak better English than many of the natives, and will also be indistinguishable in skin colour. In this way have literally billions of East Europeans come over here to perform skilled work while blending imperceptibly into the population. But there is no fooling the AI behind Pokémon Go Home. On the AR display, an Albanian orthopaedic surgeon is successfully represented as 'Albasaurus', a disgusting green monster that frauduently lives on disability benefits, while a Lithuanian microbiologist is unerringly unmasked as 'Oncosaurus', part of the immigrant cancer that is eating away at our country.

Once you've tracked down and identified your unsuspecting migrant, you 'collect' them by throwing a brick to knock them out. The player must use an actual brick, rather than a virtual one, but helpful targeting information and physical hints are provided by the phone; as we all know, the government has thoughtfully provided stacks of actual bricks for just this purpose at 'Pokéstops' all over the country. When you have successfully knocked out your target, the app automatically contacts the Home Office with a precise GPS location for the foreigner, who is then picked up in an unmarked black SUV.

At this point the player is given two choices: send the migrant straight to a deportation-processing centre, or build him or her into a powerful fighter. Excitingly,



Once you have tracked down and identified your migrant, you 'collect' them by throwing a brick to knock them out

migrants may be 'trained' using techniques shared by our friends in CIA black-ops rendition research. involving brainwashing, and forced steroid injections. When the player considers them ready for battle, migrants are paired off in a gladiatorial fight to the death, conducted at one of many public 'gyms' in popular locations. There are hundreds of such brutal fights taking place every day all over the country, though of course the migrants with the best training stats do battle at the most popular sites, such as the Olympic Stadium, the fatal encounters streamed live via Internet paysites.

The loser of each fight, of course, is bloodily killed; the winner is transported on a punishment ship to an inhospitable rocky island where it is planned that, once they are all let out of their cages, the last remaining migrants found with Pokémon Go Home will be forced to kill one another in a grand Hunger Games-style finale until only one remains. At this point the last-ever migrant will be 'plastinated' while still alive according to the preservation techniques developed by Gunther Von Hagens, and the body, as a commemoration and a warning, will replace Nelson atop the column in Trafalgar Square. Our country will finally be free of the scourge of the foreign-born.

The success of Pokémon Go Home, analysts suggest, arose from an innovative combination of two ideas: first, that the referendum result made it necessary to address the "very real concerns" about immigration held by much of the population; and second, that the best way to attack any social problem is through gamification. Pokémon Go Home's addictive way of gamifying xenophobia has shown that there is no social ill that cannot be profitably addressed in the same way. After all, before she became prime minister, Theresa May had presided over the rollout of billboard vans that literally advised illegal immigrants to "GO HOME OR FACE ARREST". The new videogame realisation of such sentiments might appear sick to a few elite metropolitan liberals still whining about racism, but its overwhelming popularity should surely be proof enough that, in post-Brexit Britain, the mood has changed. Future sequels to Pokémon Go Home will enable people to cathartically enact their dangerously repressed fantasies of abduction and abuse of any preferred minority group, because as we know, simple arithmetical majority now means justice. As another strong leader once said, more or less: Gotta catch 'em all!

Steven Poole's Trigger Happy 2.0 is now available from Amazon. Visit him online at www.stevenpoole.net



THE ULTIMATE GUIDE 2016



YOUR COMPLETE **GUIDE TO INDIE GAMES**



FEATURING



ESSENTIAL REVIEWS



DEFINITIVE



INSIDE STORIES



THE TOP 50 FREE GAMES

ORDER NOW from myfavouritemagazines.co.uk

AVAILABLE FROM





DISPATCHES PERSPECTIVE



NATHAN BROWN

Big Picture Mode

Industry issues given the widescreen treatment

ven if you didn't spend your university years playing *Mario Kart 64* in smoky halls-of-residence dorms, the human memory is an unreliable thing. Our short-term memories can, by default, only retain between five and nine pieces of information at once. Transferring them to our long-term memories only works with conscious effort — revising for university exams, say, if you aren't too busy perfecting the mushroomless Koopa Troopa Beach waterfall shortcut.

This is especially dangerous in an era of monthly subscriptions and paperless bank statements. As one conference speaker put it a few years back, when you sign up for World Of Warcraft, you forget about your gym membership - both literally and figuratively. My monthly outgoings are peppered with tiny transactions: a few quid on a Netflix unblocker that doesn't work any more, the use of a Skype number that comes in handy two or three times a year, stuff like that. I'm grateful that the services are there when I need them, but afterwards I tell myself I really ought to cancel them. And I am firm in my resolve for the entirety of the 30 seconds it takes for me to forget about them again.

Still, there's one I'll never cancel: a monthly fiver to subscribe to the Capcom Fighters channel on Twitch, giving me access to Street Fighter tournament archives. Every other channel I know provides this for free but, hev, this is Capcom we're talking about. I watch a lot of Street Fighter, and I think of this like a Sky subscription. It is, however, the extent of my engagement with Twitch's payment system. I pay money to a company, not an individual, and I mostly watch tournaments, with a host of players and pundits involved. But I feel like an exception, not the rule. The biggest Twitch streamers aren't the likes of Capcom, but people in their bedrooms playing games really well for hours at a time. Twitch's great success is that, like YouTube, it fosters a direct relationship between creator and consumer one that grows more personal over time.



When you sign up for World Of Warcraft, you forget about your gym membership – both literally and figuratively

So where I dimly resent giving Capcom a fiver a month because I have no choice, others willingly pay much more on Twitch for entertainment they could have for free if they wanted. They do so because they enjoy the streamer's work, of course — but also because they feel like they know them. A new subscription is met with some onscreen text and, as time goes on, an increasingly intrusive fanfare of some kind. The streamer reads the subscriber's name out and thanks them profusely. Crucially, they sound like they mean it. And why not? Unlike YouTube, where viewer numbers affect ad revenue, the

vast majority of a Twitch streamer's income comes from direct subs.

While off work recently, too ill to play games, I decided to watch someone else doing it. A Destiny streamer, Kraftyy, was using a lottery system to randomly select viewers to play alongside him in Trials Of Osiris. Kraftyy is an excellent player and seems a thoroughly nice chap, but his streams truly shine because he blurs the lines between performer and audience, picking someone out of the crowd and inviting them on stage, maybe even getting them some sweet loot in the process. When some doeeyed YouTuber gazes into the camera and says, "I love you guys", they are speaking to an amorphous blob of ad-revenue contributors; no doubt they are grateful for the fact that vlogging yesterday's drive to the supermarket has covered the down-payment on their next SUV, but the whole thing rings a little false to me. Yet when a viewer throws Kraftyy a \$50 tip, he thanks them personally, individually, and seems absolutely made up.

Clearly all is not as pure as it seems. JoshOG, a likeable CS:GO streamer, has been caught up in the same skin-betting scandal that recently peeled back the curtain on YouTube corruption. But for the time being, at least, such things are rare on Twitch. In an increasingly corporate industry, it's natural that something like this, which feel profoundly un-corporate, resonates so deeply. YouTube feels, to me, a little too much like a business - a home for carefully edited, aggressively monetised content made increasingly to a best-practice template and targeted at the collective components of a sales graph. Twitch, by contrast, feels pleasingly lo-fi, homebrewed, personal and honest. Unlike so many of the entries on my bank statement, it feels like something well worth paying for. Not that you should cancel a magazine subscription - to pick a random example - to make room for it, obviously.

What's up, guys, it's your boy Nathan, **Edge**'s deputy editor. If you enjoyed this #content, donations are welcome



ON SALE NOW!

AVAILABLE AT WHSMITH, MYFAVOURITEMAGAZINES.CO.UK OR SIMPLY SEARCH FOR *T3* IN YOUR DEVICE'S APP STORE

SUBSCRIBE TODAY AND SAVE! SEE WWW.MYFAVOURITEMAGAZINES.CO.UK/T3







SUBSCRIBE TO

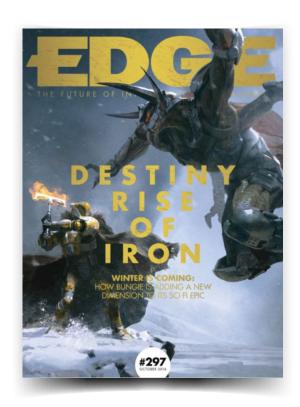
EDGE

Get the best possible value with our complete print and digital bundle



CHOOSE YOUR PACKAGE

PRINT



Every issue delivered to your door, with exclusive covers only available to subscribers

Only £16 every three months

DIGITAL



Instant digital access on your iOS and Android device, with exclusive animated covers on iPad

Only £6.75 every three months

GET THE COMPLETE PACKAGE

PRINT + DIGITAL

Every new issue in print and on iOS and Android

Never miss an issue, with delivery to your door and your device

Exclusive animated covers on iPad and subscriber-only covers for print issues

Huge savings and the best value for money

Instant digital access when you begin a subscription today



Only £21 every three months

OUTSIDE THE UK? SEE PAGE 60

SUBSCRIBE TO EDGE TODAY

VISIT 🔐 myfavouritemagazines.co.uk/edgesub

TERMS AND CONDITIONS Prices and savings quoted are compared to buying full-priced UK print and digital issues. You will receive 13 issues in a year. You can write to us or call us to cancel your subscription within 14 days of purchase. Your subscription is for the minimum term specified and will expire at the end of the current term. Payment is non-refundable after the 14 day cancellation period unless exceptional circumstances apply. Your statutory rights are not affected. Prices correct at point of print and subject to change. For full terms and conditions, please visit myfavouritemagazines.co.uk/terms. Offer ends 15/09/2016



THE GAMES IN OUR SIGHTS THIS MONTH

- PC, Xbox One

 42 Horizon Zero Dawn
 PS4
- 46 Sniper Elite 4
 PC, PS4, Xbox One

Below

36

- 50 Battlefield 1 PC, PS4, Xbox One
- **52** God Of War

- **54** Future Unfolding PC, PS4
- The Elder Scrolls: Legends

Android, iOS, PC

- 58 Sonic Mania PC, PS4, Xbox One
- 58 Rise Of The Tomb Raider

- 58 Jalopy
- 58 Celeste
- 58 Pac-Man Championship Edition 2 PC, PS4, Xbox One



(Not gameplay footage)

During one studio visit some years ago, after walking the development floor, we were led around a corner. Here was the back office: HR and office management, the admin team and, sat all alone, something we hadn't expected to find, at least not here. Someone employed – by the publisher, not the developer – specifically to make trailers and screenshots. The person responsible for showcasing a game to the public was sat as far away from the action as the person who orders the stationery.

While that may suggest disdain for the role of bullshotter-in-chief, many indie studios would kill to have such a staffer. Toronto studio Capybara Games, maker of *Below* (p36), has been candid about the difference between a good game and one that works well in the context of a tenminute showfloor demo. Capy makes excellent trailers and great demos, but three years after the studio announced *Below* on Microsoft's E3 stage, the game is still not ready for release.

In that respect, it's in good company. Horizon Zero Dawn (p42) was announced in 2015 and was expected to launch this year, but recently

slipped to early next. Creative director Cory Barlog has put an awful lot of himself into the new *God Of War*

(p52), but he has no idea when it will be finished.

MOST WANTED

Persona 5 PS3, PS4

It's OK to crave a game because its menus look cool, right? Persona 5's UI is a masterpiece, but it's on our radar for more reasons than that, not least its Tokyo setting. Tokyo Mirage Sessions showed how much a dose of familiarity can do for Atlus's special brand of fantasy.

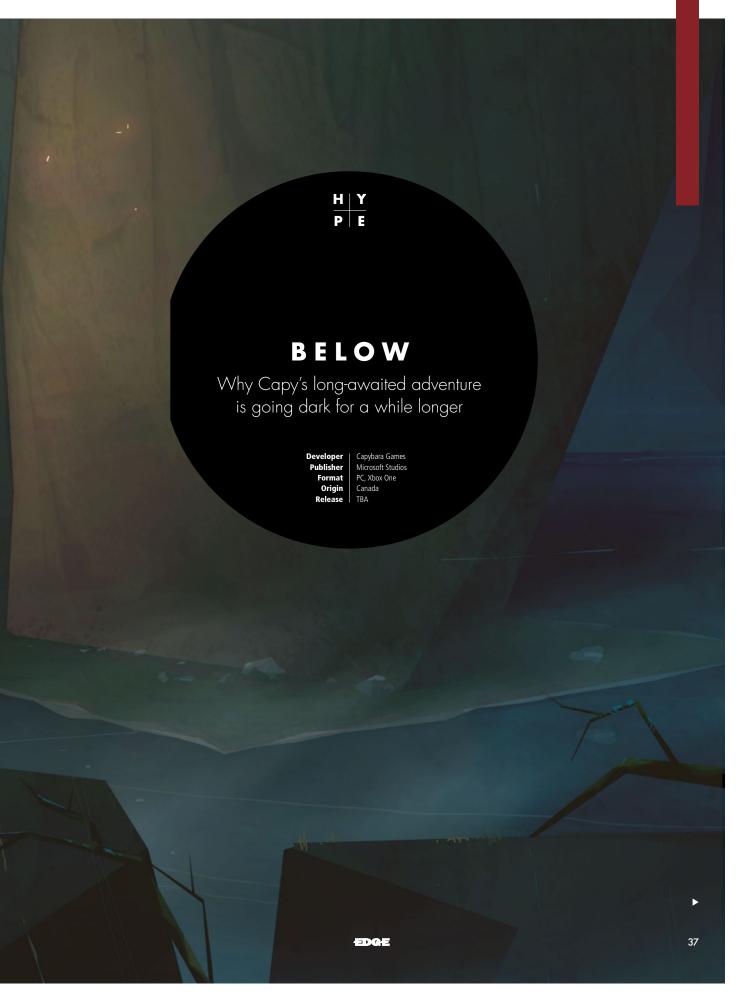
Yakuza O PS4

With Yakuza 5's PS Plus release giving us an excuse to return to Kamurocho, thoughts inevitably turn to the recently confirmed western release of Yakuza 0. An origin story set in the late '80s, YO sold like gangbusters in Japan and is now seen as the best in the series.

Forza Horizon 3 Xbox One
We once drove the Great Ocean Road,
you know, though if we're honest an
automatic Nissan hatchback wasn't the
best way to experience one of the world's
greatest drives. Thanks to Playground
Games, we're a few short months
away from getting to put that right.

The notion of a game announced and released within the same year is, it seems, going out of fashion. It's no coincidence that *Battlefield 1* (p50) is one such game, and not just because of publisher EA's relatively colossal development resources. It is, by its very nature, demofriendly, able to be sliced up into showfloor chunks without unnecessarily intruding on production; take one map and mode to E3, another to Gamescom, and repeat until launch day. Unfortunately that has not been enough to prevent EA being one of the industry's biggest offenders when it comes to high-gloss, artfully framed bullshots. But then everybody needs a job, right?







ABOVE As the game progresses, you'll find yourself less able to rely on mashing the attack button to survive encounters. Vella: "I like any element of a videogame that causes you to think about whether or not to spam buttons. One of my criticisms of *Street Fighter V* is that there is a motivation to spam light punch because it's one of the best buttons in the game. And that's the opposite of what I think is interesting about those games." RIGHT Each room is initially shrouded in mist; the more you explore, the more it clears. There's a stark difference in the speed you move through a fully lit room and one you're entering for the first time







Peer pressure

Balancing the level of visual clarity is an important concern. As things stand, Capy might have to field a few angry calls from chiropractors or opticians: for much of the ten hours we spend with the latest build we find ourselves leaning into the screen, our nose mere inches from our monitor. And yet, in doing so, we become more attuned to our avatar, as they too peer into the gloom. "That's the kind of thing we talk about!" Vella says. "Sometimes I feel like a weirdo talking about stuff like that, but games are not just about 'press button, make action', they're about how the player is actually playing." In other words, put the La-Z-Boy away: Below is designed to be played on the edge of your seat, not the back.

s president of Capybara Games, Nathan Vella has had his share of minor crises to manage. In February of this year, one hit rather closer to home. "My basement got destroyed in a flood," he explains, matter-of-factly; several months on, it's yet to be fixed. "We started peeling back the layers of how bad it was, and it got worse." He seems remarkably calm about it, but then he currently has another delicate situation to deal with. "We always knew it was going to take us a while; we were just really poor at estimating how long it would take to get what we wanted done." This time he's talking about renovations of a different kind. Capy's subterranean adventure Below had already suffered several delays when Vella confirmed at E3 that development was almost over, and the game was set for a late-summer launch. That's no longer the case; we speak to him, finding ourselves in the unusual position of

"We definitely announced it too early. We believed we could get it done by 2015"

having played a build that has the poise and focus of a game nearing release, knowing that its creator is about to postpone it again.

Vella is, quite understandably, even more reluctant now to set a date and possibly miss another deadline. There is quite a lengthy explanation for why *Below* won't be coming out for a little while yet, but it can be summed up fairly succinctly. "The whole reason why we're delaying things is because..." Vella begins and then sighs. "We see what the game *can* be, and we don't feel yet that it's *that*."

In the 11 years since its debut release, he tells us, Capy has never launched a game that wasn't up to the high standards it has set itself. Which isn't to say that this is belowpar, by any means, but given the length of time it's been in development, it would be a betrayal of everyone's hard work not to take the opportunity to push it further. "It's a hard choice to make," he continues. "It's not fun to sit down and say, 'Fuck this thing that we've been working on for years, and that we've told people three different times was coming

out at this time. It makes us feel pretty shitty. But at the same time, all of us would rather eat those feelings and give everybody something that is actually worthwhile than hustle something out."

Was that initial 2013 teaser too soon to reveal the game, given hindsight? "We definitely announced it too early," Vella concedes. "We were very ambitious. There was something really rad there already, and we were very excited by it. And we really believed that we could get it done by the beginning of 2015. That was the original goal." The thinking behind an early announcement was, in part, inspired by discussions around that time within the independent game community about the benefits of showing games early. Vlambeer was one developer to capitalise, opening up to its fanbase and allowing Nuclear Throne to evolve in public.

Yet after several hours probing *Below*'s depths, it's clear such an approach would have been entirely incompatible here. This is a game that quite consciously withholds information, and gains much of its power from how little it's prepared to give away. It presents an incomplete picture and invites the player to fill in the gaps by exploring. That has, in turn, informed the way Capy has talked about the game. "We were really interested in making a game where demos or trailers or screenshots are almost all teases," Vella nods. "There is no purely informational piece of it that we've shown, because the game is really about seeing how far we can go without information being given to the player - or even to viewers."

The appeal of building a mystery around Below was influenced by Capy's work on Sword & Sworcery, its collaboration with Toronto artist Superbrothers and musician Jim Guthrie — whose tenebrous score adds much to Below's unsettling ambience. "We took a lot of strength from that," Vella says. "We never really told anybody what Sworcery was about; we only let people play a little bit of a demo that was kind of different to the actual game." Conversely, for a man who likes to talk about what his studio is up to, it's evidently exasperating not to be able to say much more. "Below is the game that



Nathan Vella, president of Capybara Games







Your lantern produces light within a small radius, but its beam can be focused and manually aimed to reveal traps or enemies. It may even have an additional purpose...

I can't blabber about!" he laughs. "Because in a lot of ways it would ruin the work that the team has been doing."

Writing about *Below*, then, requires you to tread almost as carefully as you have to when playing it. It begins with a tiny adventurer waking up next to a tethered boat on a grey, rainswept shore. We scale a cliff face and bear right, making our way up two flights of stone steps towards the island's peak, where a rocky path leads towards an opening: tall, narrow, and impenetrably black. We stride into the darkness, taking our first steps on a journey that only ever leads downward.

We quickly locate three items that can be crafted into a torch, letting us dim our handheld lantern for a while. After a few failed experiments with other items we've foraged, a chiming note confirms another successful recipe: a bandage. We fill an empty water bottle and pick up a spear near the corpse of a fallen adventurer, descending into a larger room in which blurry red lights shift around in the darkness at the edges of the screen. Illuminated by the flickering light of the flaming torch in our right hand, these shapes form jagged and obviously deadly points, attached to shadowy creatures. The smallest slither towards you, pausing before lunging forward; larger ones scuttle away from your sword slashes. Others are larger still, advancing behind a protective claw and inviting you to raise your shield, or dodge back as they prepare to swipe.

Combat was, Vella says, one of the first pieces to slot into place. In terms of feel and rhythm, it lies somewhere between the top-down *Zelda* games and *Dark Souls*. To a point, you can mash the attack button to slash away at smaller opponents, and in the early game at least you'll rarely be punished for doing so. But since the gems they spit out upon death will often be swept out of reach if you keep swinging, you're encouraged to strike with greater care and precision.

Our two-handed spear proves more efficient in that respect, albeit less so when we aggro enough critters to end up surrounded. A hasty retreat sees us back up into a spike trap, and we're sent all the

way back to the fire we lit just inside the entrance. Next time we'll have to head back into the gloom without the contents of our rucksack and, more crucially, our lantern. After all, once your torch burns out, there's not much else to keep the darkness — and what lies within — at bay.

Light factors into exploration in a number of ways. It is involved in the creation of temporary checkpoints, which mean you've less far to travel upon death, though it comes at a cost that will have you weighing up its value. There is, too, a secret hub, not unlike Hunter's Dream in *Bloodborne*, where items persist: you can store valuables you don't want to risk losing as you head deeper, or help ensure the beginning of your next trip goes smoother by deliberately leaving behind a few of the basics. "Everything in the game is about building on a single life so that multiple lives can benefit from it," Vella explains.

The idea of one life benefitting others is, we venture, reminiscent of Capy's previous major release, *Super Time Force*. Vella suddenly sounds relieved. "I'm glad you noticed that," he says. "That makes me feel awesome. Because those games couldn't be farther apart, right? But they are both about thinking about death as [something other than] pure punishment. We're not giving the middle finger to the player and saying, 'You failed — get better'. It's more like, 'Use this temporary failure for long-term gain."

That's the kind of motivation *Below*'s 13-strong team may well draw upon in the coming months. This latest setback is undoubtedly frustrating, both for Capy and for those hoping to be playing *Below* as the nights start to draw in. But it's clearly a necessary evil, and will be to the game's ultimate advantage. "When you've put so much of your time in," Vella says, "and you've asked your employees to put so much of their time into something, you don't want to put it out before you think it's really *there*, because then what was the point of those last four or five years?"

The patience Capy is now asking of its players will surely serve them well when they finally get the opportunity to experience the engulfing embrace of *Below*'s inky depths.



Surgical procedure

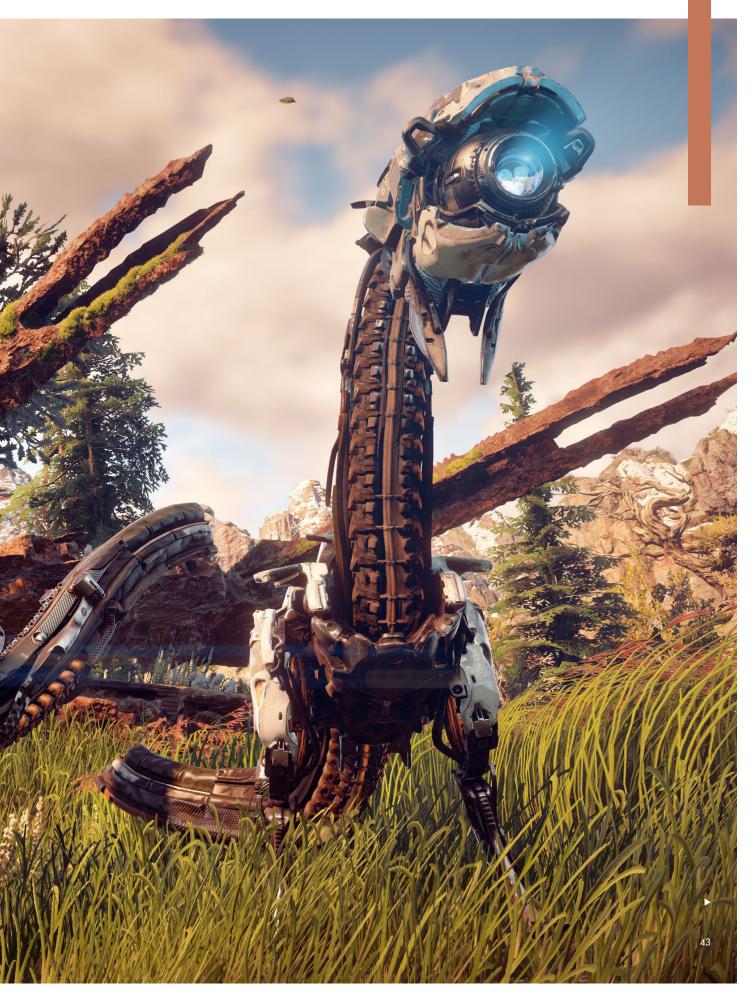
At first, we wondered if it was just our poor sense of direction. But no - Below's levels really do change each time. Procedural generation has been used judiciously: you'll often see rooms that have familiar parts but subtly rearranged. Sometimes the differences are more drastic, but these spaces still look handcrafted. "We didn't want to do it the way that, say, Derek [Yu] did. because Spelunky is a beautiful tilebased game, and it works perfectly for him," Vella explains. "The aesthetic we were going for was completely different." It's taken some time, but giving Below's programmers the space to ensure it all looks natural has paid off. "Some people don't notice it at all." Vella says, "and seeing that happen in real life is pretty darn gratifying."



LEFT If you're injured, you'll start bleeding out, losing health until you apply a bandage. There is another option if you run out of bindings, but it's painful. BELOW Vella says that Capy has gone through three different versions of Below's level generator to reach a stage where the game's aesthetic wasn't broken by the procedural elements: "We didn't want to dumb down the style of the game to fit a technical constraint, and those iterations crushed us in terms of timelines. But they were also the foundations of how we were able to build some of the more interesting stuff"











Troy Mashburn

uring our demo of Horizon Zero Dawn, protagonist Aloy tackles a towering bipedal Corrupter, which is thought to be the cause of a growing number of corrupted machines encountered in the wild. The fight, though played in realtime, is carefully choreographed for public viewing as Aloy first deploys explosive balloons, fires arrows from the back of a hacked Broadhead, and finally tethers the irritable, ancient machine before going in for the kill.

But although smart stage management neatly compartmentalises the battle, players are free to tether from the off, remain on foot throughout, or even run away and hide. This flexibility ripples throughout the entire game and promises to deliver an uncommonly deep combat system for even the action subset of RPGs. "We wanted to create a lot of tactical options so that you have different ways to approach combat," **Troy Mashburn**, lead

"We wanted the machines to be much more powerful than you are. They're really tough"

combat designer, explains. "We built a lot [of aspects] into the machines that work with the variety of weapons and different ammo types that you have along the way."

One example of this thinking manifests in the Blaze canisters that sit on the haunches of the grazing Broadheads. The sickly vellow/ green liquid that's collected as the machines 'eat' is a key resource in the game, and can be used to craft ammo. You could, of course, just kill one of the herd and extract the canisters from the wreckage. Or you could sneak to within range and knock them off with a wellplaced arrow and then leave the group to flee as you collect your prize. But Blaze is also, unsurprisingly, explosive, and hitting a canister with a flaming arrow will light the fuse on an explosion. And since that's the case, you can turn fallen Broadheads into bombs to help take out larger robots.

But while there's systemic depth in the way you can tackle any given situation, there is also added complexity in the form of the behaviour of the game's robotic wildlife. "We wanted to give creatures believable behaviours," Mashburn tells us. "The Broadhead looks like a grazing animal, so they run away when they're frightened. If you get very close and then startle them, they have a quick attack and then dash away. But the Shellwalker's main behaviour is it wants to defend the cargo that it's carrying around. You can knock it off, but then you'll notice it will put its shield up and try to get between you and the cargo to protect it. Each machine has its purpose or role, and we try to make them behave in a way that really fits that role, and also wrap that into the combat structure."

They're also surprisingly robust. Every machine poses a serious threat to Aloy, who must rely on her wits and a slow-mo aiming function that allows her to pull off impossible shots while, say, on the back of a galloping Broadhead or rolling underneath the swiping claw of a Shellwalker. But key among her strategies is the option to retreat, leaving a damaged robot for later or simply making off with a component and not putting herself in further jeopardy. "We wanted the machines to be much more powerful than you are they're more advanced, they have greater numbers. They're really tough," Mashburn explains. "The way Aloy counters those is with her agility, her weapons and her skills. But we also wanted her to be able to reset the encounter, by retreating, so she can maintain control of the situation. She's smarter than they are and knows all the weaknesses that can be exploited. That's the feeling we wanted to go for to make you feel like a hunter."

Guerrilla seems to have achieved its goal if the mingled sense of empowerment and imminent danger that arises as you stalk a target through the long grass is any indicator. And Aloy's hefty, powerful movements belie a graceful nimbleness that lets you dance around the aggressive robotic opponents, even if hubris can swiftly put you back in your place. We've seen inspired tactical choices quickly devolve into something less appealing in Guerrilla's previous PS4 effort, *Killzone Shadow Fall*, but if the studio can maintain the variety and depth on show in the small portion of *Horizon* we've played, it could turn out to be something very special indeed.



Guerrilla tactics

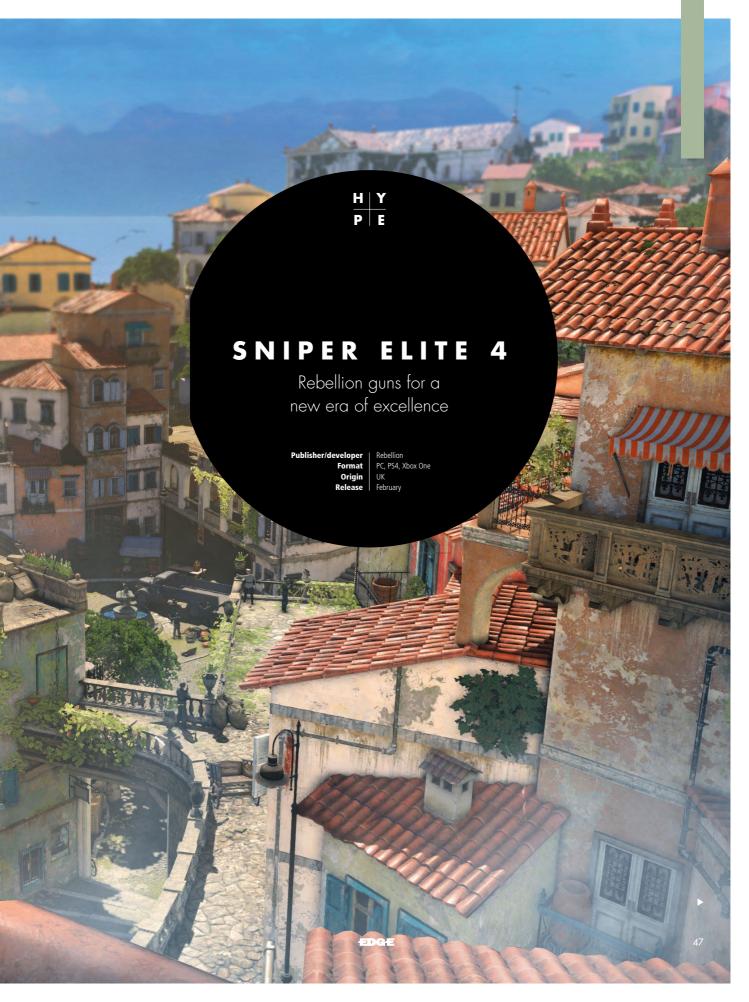
While the game features traditional boss fights, they always take place in the open world and you'll never be hemmed into an arena. It's a setup that allows Guerrilla to control your progress organically. "When you encounter something like the Shellwalkerl at the beginning, they're going to feel more like a boss, and be much more difficult to take out," Mashburn explains. "But as you get more advanced weapons, these guys won't be as much of a threat to you. As you progress farther into the world, you'll keep running into machines that feel very bosslike, and have different states and weapons you can disable. But as you improve Alov's abilities, you'll have more options to take away robots' abilities."





TOP Some of the larger creatures in the game are majestic, and encountering their dauntingly large forms in the wild is enthralling. ABOVE Guerrilla's creature designs are exemplary, blending complex machinery with organic movement. MAIN Aloy can tackle foes by simply barrelling in with a melee attack, but it's better to take a stealthy approach









hile the new *Battlezone* is set to break new ground for Rebellion as the studio strikes out into VR territory, *Sniper Elite 4* may yet prove to be the UK studio's most progressive project. Sure, it's unlikely to revolutionise the thirdperson shooter, but it represents Rebellion's biggest enterprise to date: now entirely self-funded and freed from publisher influence, the company is attempting to reposition its niche shooter for the mainstream, and in doing so transform its reputation, too.

"For quite a lot of our years we've been work for hire, which has its highs and its lows," Rebellion CEO **Jason Kingsley** tells us. "At its worst you have to just put something together over a short period of time and get it out the best you can, and you're kind of damned if you do and damned if you don't, but at least you keep people employed. You might also get to work on some brilliant



Rebellion CEO and cofounder Jason Kingsley

"It's just us making it this time, and there are no last-gen restrictions. The gloves are off"

brands, and get really big budgets if you're lucky enough. It's usually other people in control, though, and often you get other people making creative and gameplay decisions in spite of your suggestions. But now we've transitioned to working for ourselves, and that means that there isn't anybody else apart from us making the creative decisions or business decisions."

Rebellion has extricated itself from this rigmarole by stockpiling the profit it's made on previous games, and now has no venture capitalists or banks to answer to. But it does have over 200 employees across its Oxford and Liverpool studios — 120 of whom have spent the past two years working on *Sniper Elite 4* — so there is more riding on the game's success than ever before. The series is in rude health, at least, having celebrated its tenth anniversary last year and coincidentally cleared sales of ten million copies.

Further shackles that Rebellion is keen to cast aside are *Sniper Elite 3*'s links to the previous console generation. "The game was

conceived to come out when PlayStation 4 and Xbox One had been launched, but they weren't huge in the marketplace yet and PlayStation 3 and Xbox 360 were still really important," Kingsley notes. "What we did on next-gen consoles was somewhat controlled by what we could do on the old-gen formats, and obviously we didn't have enough funds to do completely different versions. On Sniper Elite 4, we've used our own engine fully, we're entirely self-funding it - 505 isn't the publisher any more, we are. It's just us making it, and because there are no last-gen restrictions this time, the designers, artists and coders have been able to say, 'Right, the gloves are off now."

The resulting game bears clear evidence of this redoubled effort, boasting densely detailed, sprawling open-world maps, ramped-up enemy AI, and overhauled controls and abilities that ensure everything feels more polished. The studio is well aware of criticisms levelled at previous games in the series, and is using its carefully planned budget to address them.

"It's a fairly big budget from our perspective - we're talking millions of pounds, but not tens of millions. So we're competing in the worldwide marketplace with a game that probably costs a fifth of what some of the biggest games out there cost to make, but I think will probably sell as well. So I'm very proud of what the team has done. We've built on the successes of Sniper Elite 3, and we've listened to the feedback of the fans and journalists' constructive criticisms. If somebody just says that the game's shit then there's not a lot we can do about that, but if somebody says, 'I didn't really understand the AI,' or, 'Collision was a bit ropey, those are all legitimate things we can look at and address. So that's what we've tried to do: we've redesigned the AI from the ground up, and tried to improve how we communicate what the AI is doing to the player. If a soldier is panicking, they sound like they're panicking, and they say they're panicking. So the player is completely comfortable and says, 'Oh, they're panicking,' rather than going, 'Why is the AI doing stupid things?'"■



Rejecting authority

Founded in 1992, Rebellion is one of the UK's longest-running independent studios, but with its newfound ability to selffund, we wonder if Kingsley feels this is a rebirth. "Somebody described us as a 'super indie', and I said, 'Well, I kind of get that, but we were sort of indie before indie was a thing," he says. "That sounds a bit hipster, doesn't it? In some ways it is a rebirth. But it's been three years, so it doesn't really feel like, 'Ooh, right, it's Tuesday - now we're fully independent'. And games take a long time to make, so I guess Battlezone will be our first fully selfpublished title. Maybe another way of putting it is that if I was going to write a book about Rebellion this would be the point where we finish a chapter and start the next one."



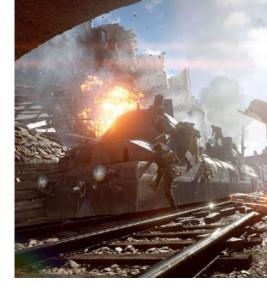




TOP If enemies spot or hear you, they will quickly investigate the area, a luminous outline of your last known position helping you to know how far to scarper. ABOVE This is certainly the best-looking Sniper Elite yet, taking in more diverse scenery than its forebears. MAIN When your stealthy tactics go to pot, the game acquits itself well as a traditional thirdperson shooter (though hiding again as soon as possible is still the best option)

Developer DICE Publisher EA Format PC, PS4, Xbox One Origin Sweden Release October 21







As with Battlefield 4, some

additional players in gunner positions – the Mark V's

vehicles will accomodate

. side-mounted machine

guns make it a formidible

BATTLEFIELD 1

DICE looks to the past to build the future of its series

attlefield 1 may have leapt back in time with regard to its setting and necessarily contemporary kit, but DICE has every intention of creating its most technically advanced series instalment yet. "The way we look at it internally is that Battlefield 1 is a sequel to Battlefield 4, so turning the clock back on time isn't the same thing as turning the clock back on development, or how we look at shooters in general," senior producer Aleksander Grøndal tells us. The game is certainly the best-looking Battlefield yet, volumetric fog rolling across its ravaged fronts, and there's a solidity to the game's controls and movement that feels a cut above its predecessors.

"I would say that it's actually more authentic now than *Battlefield 4* was," Grøndal continues. "The jets, for instance: if they were real, they'd swoop by in half a second, drop a bomb from miles off, and you'd never see them. The biplanes and airplanes we have right now are flying closer to their real speeds, so it feels more believable."

This refocusing of the scale of interactions within the game also inspired the new Tanker and Pilot multiplayer classes, which transform vehicles from temporary buffs into something with greater permanence and impact. It's a profound shift for a series whose multiplayer rhythm has always tracked more towards staccato than legato.

"When you pick a vehicle, we really want to make sure that you feel like you should play that role," Grøndal explains. "So, if you choose to be a pilot, that's your primary weapon. We want you to feel like, 'OK, I'm an attack pilot. That's what I do. I'm not some random guy in a plane — this is my job on the battlefield.' We want to get away from people



Senior producer Aleksander Grøndal









LEFT DICE has yet to let us loose on its animals, but equine companions risk being an awkward presence on the battlefield if they're not integrated with care



TOP LEFT Trench warfare changes the flavour of Battlefield 1's warfare, the environment a more prominent consideration in tactical decisions this time around. The behemoth-class train is yet to be shown in action but will be a robust presence when it appears. ABOVE Despite the older technology featured in the game, Battlefield 1 will still include some sprawling maps among its lineup Expect to visit, among other locations, western France, the Italian mountains, and the arid Arabian desert

just jumping out of planes up in the mountains to snipe."

Tanks will also be a more imposing presence, enduring a little longer than *Battlefield 4*'s equivalents under fire and representing a chilling threat to infantry — especially as the Tanker class inherits the now-absent Engineer's ability to repair vehicles, and can do so while holed up behind the armoured body panels of their vehicle.

Despite this new level of symbiosis, you won't be bound to your vehicle. Pilots and tankers are still at liberty to get, or be forced, out of their charges, and will have access to their own gadgets and weapons when on foot. All classes will still be equipped with parachutes, too, though they'll take longer to open and arrest your fall. The setting also means lock-on weapons are no longer part of your arsenal, which will come as a shock to players who rely on guidance systems.

All of the game's vintage kit is being treated with the same attention to audio that DICE's series is known for, and to that end the team have been up in biplanes to record

engines and wind noise, and have travelled the world to find working examples of as many of the weapons and land vehicles included in the game as possible. Where an inclusion's reallife equivalent is no longer available, DICE has used the closest examples it can get its hands on, including WWII weapons.

It has also ramped up the level of destructible elements in its environments, though the set-piece transitions that defined *Battlefield 4* have been subsumed by the new game's dynamic weather and conditions.

"What Levolution was to us and what Levolution perhaps turned into was two different things," Grøndal explains. "For us,

"We actually got feedback at one point that we had too much destruction"

it was basically about being a dynamic sandbox, with experiences that are constantly changing. That's what we meant by the term, but people just talked about the set-pieces. So the weather and what we're doing with destruction is a continuation of that train of thought. But this time we're not branding it in a way that [will make] people laugh at us again. Everyone thinks that marketing invented that term, but it was actually invented by the dev team themselves!"

In shaking free of perceived gimmicks, though, DICE risked breaking its game. "We actually got feedback at one point that we had too much destruction," Grøndal explains. "We had to dial it back! People want hard cover, so we can't level everything. But we have Bad Company 2-style whole-house destruction, and ground destruction where you'll be generating quite deep craters that change the topography of the map itself. You can use them for cover, to create traps, or whatever you want. It's interesting; it's something we haven't dived into as much before." ■



War games

Battlefield 1's setting, especially when set against pulse-raising trailers, has caused some controversy. Grøndal is mindful of the potential difficulties created by working with a real conflict. "I completely understand that, culturally, people stand differently in how they relate to this conflict, and we respect that. But first and foremost we're a game - we're not trying to create a documentary. It's not about being fully authentic. That said, I think just being able to raise awareness of a conflict that many people don't know much about is good. If Battlefield 1 could get someone interested enough to read some Wikipedia articles or a book about WWI, that would make me super happy."

The Zeppelin is brimming with weaponry and can rain down ordnance on the opposing team. It can be destroyed, but doing so requires coordinated effort



Developer/publisher
SIE (Santa Monica Studio)
Format PS4
Origin US





GOD OF WAR

All right, Mr Odin, I'm ready for my closeup

od Of War has changed. Kratos has grown a beard, and sprung a child; he has travelled, soul searching, and ended up in Scandinavia at a time when, awkwardly for a man who just wants to be left alone, the Norse pantheon of gods looks down from on high. Yet it's the new perspective that represents the most transformative change. Previously positioned high above the action to accommodate Kratos' swirling combo strings tearing into enemies, the camera now sits tightly over the god-killer's shoulder.

While born in part from Sony Santa Monica's desire to make this a more personal, reflective tale than games past, it's also a

"I wanted to go deeper into what makes Kratos tick. To do that, we had to be up close"

decision taken from a gameplay perspective, recognising that after over a decade's worth of games cut from such similar cloth, Kratos needed to change - and a bit of on-trend facial fuzz wasn't quite going to cut the mustard. "We needed to shake things up," creative director Cory Barlog tells us, recalling the early days of pre-production when a dozen Santa Monica staff - many of whom, like Barlog, were veterans of the first God Of War - began kicking around ideas. "Of the 12 of us, six liked the cinematic cameras, and six thought we should change them. I knew I wanted a very personal story for Kratos: I wanted to go deeper into what makes Kratos tick. And to do that, I felt we had to be up close - as close as we possibly could be."

Inevitably, given the divide in opinion, this took a while. Barlog would be shown a build, say the camera needed to be closer, then return a few days later to find it was still too far out. "Finally I annoyed Jason McDonnell, the lead combat designer, enough that he used some colourful language to tell me to go away."

Barlog laughs. "He said, 'Don't come by my desk for two days.' I expected to go back and have him show me this really wide shot and say it was the best we could do. He'd gone even closer than I wanted it."

It was worth the effort, since it fixes this series' longest-standing mechanical problem. For all the guts and the gore, *God Of War*'s combat has lacked weight, Kratos' twirling chains passing uninterrupted through enemies, viewed from 100 feet in the sky. Things would bleed and fall apart, but you never really felt like you were the one that made it happen. From this closer perspective, you can see, almost feel every blow connect.

Still, there's a reason most games in this genre are viewed from a more distant angle. Crowd control, from this close in, is sure to be an issue. The ice axe Kratos uses in our demo can be swung as a melee weapon, or flung and recalled at any time, even if you used it to pin an enemy to a wall in the intro and are fighting the final boss. The game's other weapons will need to meet similar needs if this risky endeayour is to prove a success.

Yet perhaps the biggest risk is Kratos' son. While an ideal vehicle for a more personal story, it risks diluting that which defines God Of War: fans, after all, like Kratos because he rips the heads off gods, not for the stern ticking-off he gives his offspring for scaring off a stag during a hunt. Barlog recently had his first child. Does he worry he might be putting too much of himself into the new Kratos – a Kratos players don't necessarily want? "Our lives shape everything we do," he says, "Whether you create fantasy or science fiction, if it comes from no place of truth, it's empty. The audience may not be asking for Kratos to have a kid; I don't think the audience asked for Kratos to begin with. They don't know what they want until they see it. I personally don't think creative people can over-project. It's not possible." Here's hoping Barlog Jr never messes up on a hunting trip. ■



God of lore

Eleven years on from Kratos' debut, Barlog is positioning Kratos' PS4 debut as the beginning of the second chapter of his life. That's a rather drawn-out opening act. "We spent seven games looking at the story of Kratos, the birth of the antihero," Barlog says, before pointing to the TV series Arrow, which starts out casting its protagonist as a traumatised. revengeful murderer, then allows him to redeem himself in the second season. "To take someone who's been all the way to the brink and get people to actually root for them, to feel something... the idea of not using that for Kratos is just crazy."





TOP Boss battles will be a challenge given the new perspective. The fight in our demo has a well-behaved camera, but also appears to be heavily scripted.

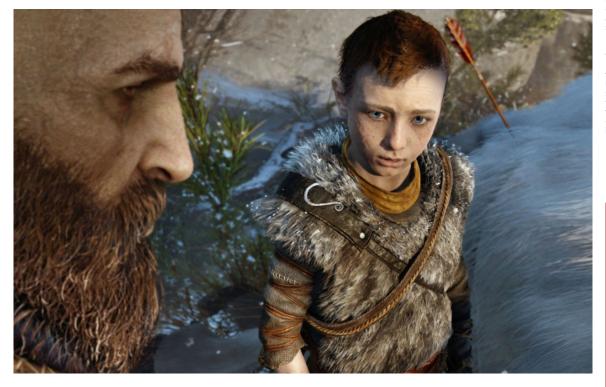
TOP RIGHT After a decade of increasingly unhinged rage, Kratos now does a fine line in withering disappointment. You've a vested interest in his son's education, since the two share an XP bar. RIGHT Combat is pleasingly crunchy, but will be defined by the functionality of weapons. Rather than swishing away screenfuls of enemies, the combo system must be designed to empower experimentation as well as destruction







ABOVE CENTRE After messily dispatching the Greek gods over the space of six games, Kratos arrives in Scandinavia just wanting to be left alone. It's a sentiment a lot of parents may empathise with. ABOVE The gameworld will be larger and more freely explorable – pickups hint at some kind of crafting system, for instance – but Barlog is reluctant to call it "open", feeling it, rightly, to be too loaded a term. MAIN The boy helps his father out in combat, though his lack of prowess early on sees him wing Kratos, rather than the troll he was aiming for. Still, he shoots at lesser enemies well enough, and his skills will improve



Developer/ publisher Spaces Of Play Format PC, PS4 Origin Germany Release 2017







FUTURE UNFOLDING

A journey into nature becomes a beguiling, Byronic enigma

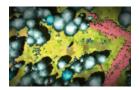
lion in a cave is quoting Byron at us. Then again, it's not long since we used some blue flowers to change the rest of its pride into rabbits. Or, for that matter, since we managed to get a sheep to teleport us to a new area. Though we're still not really sure what the birds do. Our notes after playing Future Unfolding's preview build might read like a particularly feverish hallucination, but then this intoxicatingly strange game feels a lot like a vividly remembered dream. The top-down view probably has something to do with it, but it has a similar woozy, heady quality to Hotline Miami - if, perhaps, Dennaton's troubled antihero had swapped guns for a moderate amount of peyote and headed off into the countryside to find himself.

We are, quite thrillingly, lost. *Future Unfolding* thrusts you into a world without

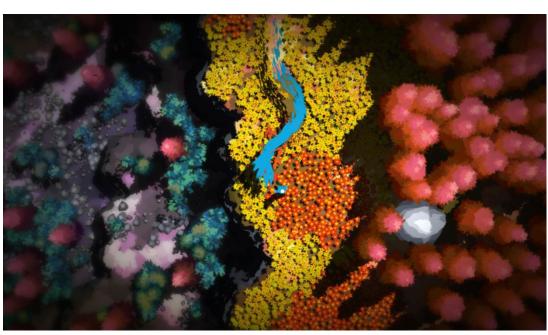
a hint of reason or a purpose. There are no control prompts or objective markers. There's a map, but it's one whose landmarks are only filled in after you've discovered them. It all looks both familiar and otherworldly: the rocks, the vegetation, the animals give it a grounding in nature, and yet the colours are a little off. And our avatar is probably the strangest ingredient of all, a bright-blue figure who leaves a thick trail behind him as he runs.

That lack of instruction, and the accompanying feeling of directionlessness, will be daunting to some and empowering to others. We've grown accustomed to being coddled by modern games, to being shown exactly where to go at all times. Icon-studded maps and manual waypoints have become the norm. *Future Unfolding* isn't the first game to react to that, but it takes it a step further than

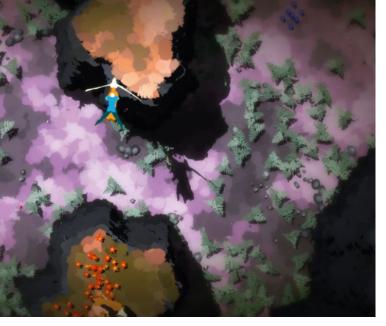




ABOVE CENTRE At one stage, we manage to get a sheep to blink out of existence. That rules out 'shepherd' as a possible career move. ABOVE Patches of flowers in a pattern usually mean something. Sometimes they'll give you a temporary boost, elsewhere, they might morph into a barrier, or cause some other environmental effect



Every object is composed of dynamic particles. You can push your way through trees in the forest, and dash through vegetation to destroy it



LEFT You can climb down slopes, but you won't be able to go back up the same way. You'll usually find a circuitous route to higher ground; otherwise, command a steed to leap the gaps. BELOW Any deeper meaning to Future Unfolding's strange patterns may be hard to divine, but we sense that it's consciously designed to be open to interpretation











many. Which isn't to say you won't find the odd bit of gentle guidance, but these come in unlikely forms: a strange green substance in a suspiciously geometrical arrangement on the ground, or a pink rabbit that darts off as you approach. Each of these curious occurrences prods at your natural inquisitiveness.

We follow the rabbit and eventually it slows down long enough for us to tame it by pressing the all-purpose context-sensitive interaction button. The only other command is a temporary sprint, which can be extended by gathering fruit. While most of your exploration will be at walking pace, you'll occasionally bump into more dangerous creatures. Snakes launch a venomous spray in several directions and must be avoided, while lions prowl aggressively before telegraphing a rush attack that means an instant kill if it connects. Die, and a hole quickly opens up in the ground and then contracts to nothing, leaving a tree in your wake. Within seconds, you'll be returned to the world, albeit in a safer place within the same area.

There are portals to locate and nodes to activate, but these are no ordinary locks and keys. There'll sometimes be single solutions to individual problems — at one stage we tame a long-horned steer in order to leap across to a distant cliff — but environmental puzzles feel more like an organic part of the world than a conspicuous form of gating. You'll rarely find yourself looking for anything specific as much as discovering things by stumbling across them and steadily figuring out their place in the world — and, to a point,

your own. As you play, the title feels ever more fitting: this is a place that spreads out and develops over time, steadily revealing more of itself until it achieves a certain familiarity. Parts of it are still dangerous, others opaque, but it's no longer unknowable.

For some, *Future Unfolding* will be a world to be pleasantly perplexed by. Others will view it as a giant puzzle to be slowly deciphered. This isn't a place governed by

Future Unfolding thrusts you into a world without a hint of reason or a purpose

real-world logic, but there's a consistent set of rules to learn. The absence of assistance means minor discoveries become more significant epiphanies: clambering aboard a four-legged beast is one thing, but it's not much use until you learn how to control it. With just two buttons it's not difficult to figure out the secret, but the solution is all the more satisfying for being unprompted.

That inscrutability will, undoubtedly, be a turn-off for some. Likewise, its stubborn refusal to offer any easy answers as to what it might all mean. And it does lack the innate warmth of something like *Proteus*; having its creatures quote Byron and Robert Frost may be a highfalutin affectation too far. And yet, much as its elliptical nature perhaps creates a certain emotional distance between player and game, this is a fascinating world to experience. We may never understand the wider significance of the birds. Maybe there isn't one. But for us, the lion's right. There is pleasure in these pathless woods. There is rapture in the lonely shore.

World in motion

You might think a game whose appeal hinges upon acclimatising to its rules might lack replay value, but Future Unfoldina should play a little differently each time. It uses a combination of procedural generation and manual design, so that while the layout of the world and the behaviours of its flora and fauna will be different, the puzzles can be more tightly controlled by the designers. There will always be some form of danger lurking, though even apparent threats can become useful: in one playthrough we use two snakes to clear a blockade of boulders.

One lion is easily avoided, but usually you'll find more arriving on the scene quickly. They pause briefly before pouncing, giving you just enough of a window to be able to dash clear



Publisher Bethesda Developer Bethesda, Dire Wolf Format Android, iPad, PC Origin US Release 2016





THE ELDER SCROLLS: LEGENDS

Heroic card battling craze reaches Tamriel

PGs and card games go together well, and it would be easy to dismiss Legends as an attempt to jump onto the bandwagon. Certainly many of its details are rather more cloned than inspired — the cost, for instance, of an arena run, or eschewing trading in favour of making whatever cards you want with sufficient play.

Legends is an overtly tactical game, splitting the battlefield into two different lanes. Minions summoned from your collection of cards — a deck starting at 50, rather than Hearthstone's 30 — can only directly attack enemies in their current lane, with the added complexity that one lane is

So far it lacks personality in everything from the board design to playing animations

typically a 'shadow' zone where they're safe from direct attacks for a turn. That means it's a good place to stock minions that get a buff each turn, or to place your heavy hitters so that you at least get one good strike out of them — but, of course, doing that leaves your other side unguarded, and your opponent will know where to guard or counter.

That's just one twist, though. Hearthstone treats its minions as largely disposable, with a few cards that can synergise and buff them to high levels. Legends instead favours direct upgrades, from basic +2/+2 to strength and hit points in the shape of a new weapon, to being able to give an already-buffed unit the 'Lethal' tag that takes anything out in one hit. Elsewhere, while Hearthstone is a class-based game that serves up its cards around specific playstyles, Legends splits its cards into classic stats such as Strength and Intelligence — each deck being a mix of two.

The whole system is sleek, considered and, in personality, about as fitting for *The Elder Scrolls* as *Hearthstone* is for *WOW*. The catch

is that in being that, it's also far more po-faced, and just plain less fun. This may be a bonus for players who find Hearthstone to be too much of a cartoon or too tuned towards casual play. The raw game is solid. Enjoyable. Full of options. When looking through the card selection, though, it's hard to find much that jumps out as a card to crave as well as to craft. Far too many are all +2 this and -2 that, various types of soldier or bandit, with no fun card text to read and rarely any interesting special abilities. Calling up Odahviing (one of the Dragons of Skyrim), for instance, deals a handy four points of damage to each enemy - but that's hardly the oomph of summoning Deathwing in Hearthstone in all his 'crush everything, discard your whole hand' glory.

We were hoping to see the Daedric Princes offer a chance to really mess things up, but so far their only real representative is god of madness Sheogorath's Wabbajack, which offers three chances to turn a creature into another random one. How about transforming the whole enemy team? Strategically, yes, Legends is better off without the likes of Yogg-Saron (cast a random spell for every spell cast), but it's also much less interesting to play, and no doubt will be to watch once the streamers and the competitive scene get their hands on it. Hopefully a few crazier cards will be coming because so far it lacks personality in everything from the board design to dramatic card-playing animations.

Despite that, it's the core game that matters right now. Here, at least, Legends currently stands out as feeling like a worthy game for Hearthstone players to step up to if they fancy more of a challenge or have grown weary of yelling 'Bullshit!' at its heavy focus on RNG and fairly limited meta. It feels solid, satisfying and well thought out. If it can find a way to channel a bit more of its parent franchise's fun and whimsical side into the mix, it might really come to life.



Luck of the draw

There are always luck elements to CCGs, down purely to the card-draw mechanic The biggest here are Prophecies. Every five health points you lose unlocks a free card. If it's one with the Prophecy effect, you can use it for free, in the middle of the other player's turn. (Drawn naturally, it has a cost like any other.) It might be a free minion, or something like a fireball spell that will take out the unit the other player just put down. Players missing elements such as Magic: The Gathering's 'declare blocker' stage may appreciate the additional nudge away from Hearthstone's pure turns, but mostly it's an annoying mid-turn distraction that can't really be played around or predicted well enough to feel like a tactical addition.





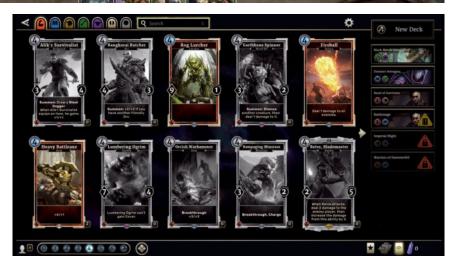






classes as such, but your choice of avatar determines which free cards unlock later. MAIN Legends offers more card effects than Hearthstone, including Breakthrough, which passes excess damage dealt to a minion on to its hero

TOP Lanes can change between games, being two of the same, a regular and shadow lane, or in other modes mixing it up a bit. RIGHT As in *Hearthstone*, you can craft cards, or get them in packs bought in the store or earned during play





SONIC MANIA

Developer Christian Whitehead, PagodaWest, Headcannon Publisher Sega Format PC, PS4, Xbox One Origin Aus, US Release 2017



Wait, come back! Improbable is it may seem, this one might actually be OK. Sega has finally realised it is no longer the safest pair of hands for its own mascot. At the helm of *Sonic Mania* is Christian Whitehead, an Australian developer behind hobbyist, and then official, mobile ports of the first two *Sonics*; his LA-based collaborator Headcannon; and Portland studio PagodaWest, developer of the thoroughly *Sonic*-like *Major Magnet*. *Mania* stitches together redesigned levels from the first three *Sonic* games with some brand-new creations. Series fans are a forgiving bunch, but for once their optimism appears justified.

RISE OF THE TOMB RAIDER

Developer Crystal Dynamics Publisher Square Enix Format PS4 Origin US Release October 11



With time running out on its Xbox exclusivity deal, Crystal Dynamics is starting to let slip its plans for *Rise Of The Tomb Raider's* PS4 release. Heading the list of additions is Blood Ties, a new story chapter set in Croft Manor which will also be playable via PlayStation VR. Elsewhere it's predictable fare – the odd new mode, all previous DLC – but whether it will draw the crowds six months after the arrival of *Uncharted 4* remains to be seen.

JALOPY

Developer MinskWorks **Publisher** Excalibur Games **Format** PC **Origin** UK **Release** TBA



It may be tempting to roll the eyes at a game for sale on Early Access while still in pre-alpha, but for *Ialopy* it kind of makes sense. As you drive a knackered old banger across the Eastern Bloc, repairing and rebuilding it along the way, developer Greg Pryjmachuck does the same to the game itself.

CELESTE

Developer/publisher Matt Makes Games **Format** TBA **Origin** Canada **Release** TBA



The next game from *Towerfall* creator Matt Thorson may be a singleplayer platformer, but it ploughs a similar furrow. At *Celeste's* core is a tight design with nothing but a jump, a wall-hang and a single airborne dash available as you scale a mountain in a series of single-screen, pixel-perfect challenges.

PAC-MAN CHAMPIONSHIP EDITION 2

Developer/publisher Bandai Namco **Format** PC, PS4, Xbox One **Origin** Japan **Release** September



The brilliant 2007 reinvention of *Pac-Man* is long overdue a sequel, though it comes with the odd concern. Does *Pac-Man* really need boss battles, moving fruit, or a new ghost-bump mechanic? Maybe not, but more of the best time-attack game in a generation earns it the benefit of the doubt for now.



THE ESSENTIAL MAGAZINE FOR PS4 OWNERS







http://bit.ly/officialplaystation



SUBSCRIBE TO





WHEREVER YOU ARE IN THE WORLD

Quarterly prices

PRINT

DIGITAL

PRINT+DIGITAL

IN
THE UK?
SEE PAGE
32







Europe	€28	€9	€35
US	\$28	\$9	\$36
Rest of the world	\$30	\$9	\$39

Choose a **print subscription** and get every issue of **Edge** delivered to your door for less than you'd pay in the shops and with exclusive subscriber-only covers.

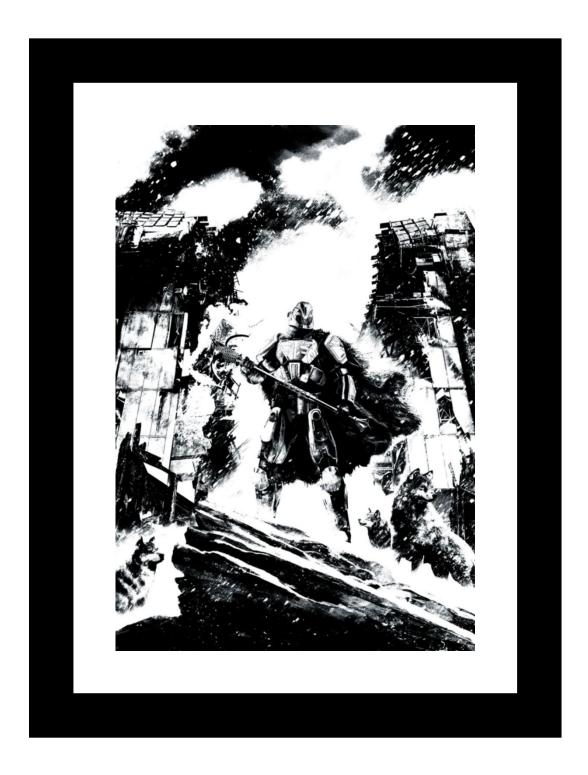
Choose a **digital subscription** and get every issue of **Edge** on iOS and Android delivered on the UK on-sale date.

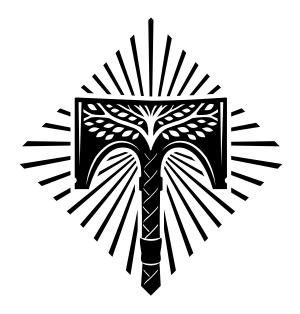
Get the best value with the **print + digital package**: instant access to the digital edition on the UK on-sale date, plus a print copy, with exclusive subscriber-only cover, to your door.

SUBSCRIBE NOW myfavouritemagazines.co.uk/edge

VIDEOGAME CULTURE, DEVELOPMENT, PEOPLE AND TECHNOLOGY







I R O N B O R N

Bungie is getting medieval as it gears up for Destiny's third year

By NATHAN BROWN

here else can we start, but Gjallarhorn? Throughout *Destiny*'s first year this mythical rocket launcher was, for those not blessed by capricious RNG, the game's whitest whale. To those that had it, it was their best friend, since it was by a distance the game's greatest weapon. But to Bungie it was *Destiny*'s biggest problem. It melted enemy health bars, so Bungie made enemies tougher, and more numerous, in order to give players a decent challenge. The Gjallarhornless were left behind, frustrated, locked out of pickup raid groups by players who deemed it so essential that they refused to play with anyone who didn't have it. Rumours swirled of *Destiny*'s troubled development: of a late, desperate rewrite of its story, of problems with Bungie's toolset, of the studio's struggles in adjusting from making *Halo* to *Destiny*'s living, immeasurably more complex world. But really the biggest problem was a rocket launcher whose payload splintered into heatseeking cluster bombs, and did its job a little too well.



TO THE PLAYER IT MEANS GETTING THEIR HANDS BACK ON A GUN THEY THOUGHT HAD BEEN LOST FOREVER

How, then, do you a solve a problem like Gjallarhorn? Do you make it less powerful, knowing doing so will make it less exciting? Do you buff everything else, with likely the same results? For last year's *The Taken King* expansion, Bungie decided the best, most elegant answer to The Gjallarhorn Question was to not answer it at all. It abandoned the gun entirely. Power crept and slunk away from its former king, the most powerful gun in the game's first year unable to keep the pace in its second.

The game was a good deal better balanced as a result, but perhaps a little less exciting. Now, as Destiny prepares to enter its third year, Gjallarhorn is back. Complete an early quest and, regardless of whether or not you ever had it - and irrespective of whether you preordered Rise Of Iron for that exclusive weapon skin - Gjallarhorn will be yours. Rise Of Iron's overriding theme, we're told, is nostalgia; in story terms that means travelling far back in Destiny's lore, but to the player it means getting their hands back on a gun they thought had been lost forever, sealed away beneath the Earth by a development team that wanted to save future generations from the game-breaking problem it had unwittingly created. Coincidence: that is also pretty much the setup for *Rise Of Iron*'s story missions.

It is also a decent way of explaining the current state of Destiny. Yes, Gjallarhorn is back but, necessarily, it isn't quite so exciting any more. It still kills things, still has those heatseeking cluster bombs, but now it dents, rather than obliterates, a large enemy's health bar. While Bungie has never confirmed it, it is an open industry secret that Destiny 2 was originally meant to launch this autumn. Only a few months ago, when the decision was made to push its release back to 2017 - a decision that seemingly did for now-ex-Bungie-president Harold Ryan - did Rise Of Iron come into existence. The Taken King creative director Luke Smith is now leading development of the full Destiny sequel. Giallarhorn may not be the gun we fell in love with, but it is still Gjallarhorn. Rise Of Iron may not be Destiny 2. Nor does it represent quite the same level of transformation for Destiny as a whole as that delivered this time last year by The Taken King. But it is new Destiny, and if you love Destiny, then that will suffice for now.

Which is not to say that this is the work of a studio going through the motions. Instead, it's the product of a company that seems, steadily over time, to continue working to understand the complex beast it has created. What works and what doesn't; what needs attention and what is best left untouched. So, building on the tremendous narrative progress made in The Taken King, story again sits at the core of Rise Of Iron. And just as last year's expansion turned some of the static, bland NPCs in its social hubs into actual characters, this year's tells of Saladin, the last surviving Iron Lord. For the past two years his Destiny role has involved standing before a flaming gong every fourth week as host of the Iron Banner multiplayer tournament. For a time, it was the PVP connoisseur's only route to endgame gear, including weapons named after Saladin's fellow, fallen Iron Lords. Gheleon's Demise, Jolder's Hammer, Timur's Lash; more excellent names for guns in a game that is full of them, yes, but they hinted at something bigger. Gheleon, Jolder and Timur were once Saladin's brothers in arms. They were nine in all, and together sealed a devastatingly powerful relic deep beneath the surface of Russia's Cosmodrome, a mission that spelt the end for all of them but Saladin.

The Fallen have been digging up the Cosmodrome looking for this relic and, inevitably, have finally found it. Using its power, Siva, they have augmented themselves to form a new faction - part Fallen, part machine - called the Devil Splicers. Just as last year's Taken riffed on existing enemy designs, Devil Splicers look familiar - red and black compared to the regular Fallen's blue and white but may act in alien ways (on death, Vandals release a heat-seeking orb of purple energy, similar to the Hive's Shriekers). You'll fight them across the Cosmodrome, the first area you visited in vanilla Destiny, but which has now been expanded and covered in a thick carpet of snow. It is by-the-book Destiny expansion-making: having you venture through an area you know and fight enemies you recognise, but in a subtly, sufficiently different way for the whole thing to feel fresh. That, according to lead world designer Steve Cotton, chimes well with Rise Of Iron's narrative themes.





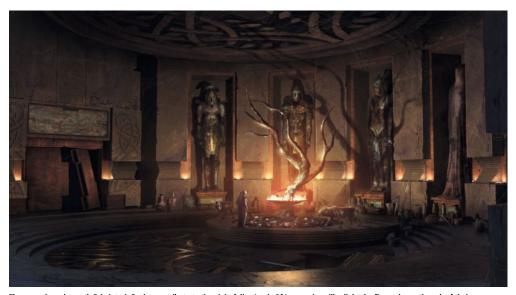
Game Destiny: Rise Of Iron Developer Bungie Publisher Activision Format PS4, Xbox One Release September 20



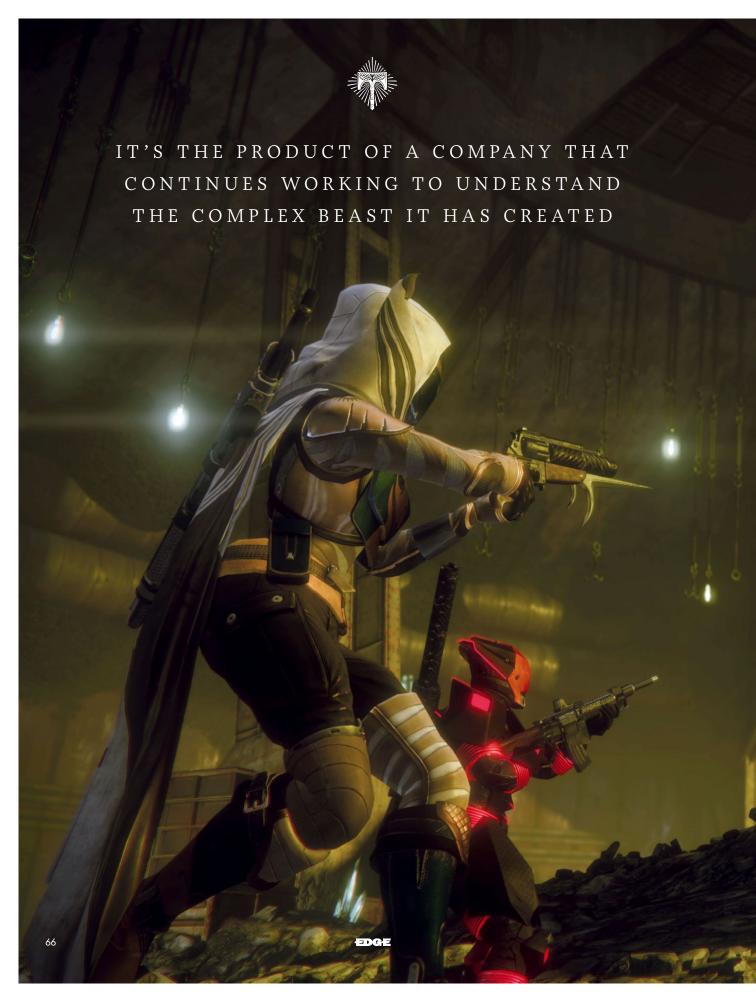
This early concept art set the tone for *Rise Of Iron*. Game director Chris Barrett (above left) and executive producer Scott Taylor (above right) insist that Game Of Thrones never came up. We almost believe them

PATIENCE AND TIME

Bungie isn't about to let much slip about *Rise Of Iron's* raid, though given this is the game's fourth such challenge, we can hazard a guess at what to expect: exacting boss battles and comic-relief jumping puzzles, this time set in the Cosmodrome against Fallen enemies, interspersed with profane teeth-gnashing over the headset from that one guy in your raid group who's been after a pair of new boots for two months, and just got another sniper rifle from a loot drop. Game director Chris Barrett is typically elusive on the specifics. "Our goal is to make a raid that's challenging, but not too challenging," he says. "And not too long, also: we've varied the length of our raids to try to dial in on the right time commitment. Eight hours? Most of us real people can't handle that. But it's generally about the new location, the new combatants. It's got some outdoor spaces that we haven't done in a raid before. Every raid is different! I think you'll see that this one stands on its own, too."



The mausoleum beneath Felwinter's Peak pays tribute to the eight fallen Lords Of Iron, and you'll relight the flames beneath each of their memorial statues by performing a ritual each week. "It's an exciting thing when you do it," Taylor says. "There's a little pomp and circumstance"





IRON BORN



From what we've seen so far, the Devil Splicers aren't as much of a departure from the regular Fallen as last year's Taken were from the game's standard enemies. Perhaps that's no bad thing, given how annoying Taken Captains were. The Splicer variant (above) plays much closer to type









While the Iron Gjallarhorn skin (left) is only available to those who preorder *Rise Of Iron* – along with the garish Gjallarwing Sparrow – the Iron Lord armour sets (above) are fixed rewards for completing tasks in the new Record Book



"THIS IS ABOUT THE IRON LORDS AND NOSTALGIA. IT'S NOT ABOUT BURYING THE PAST, BUT APPRECIATING IT"

"We built *Destiny* to be able to tell a lot of stories," he tells us, "and we chose this because we felt it was a different type of story than the player had been through before. *The Taken King* was about revenge; [year-one DLC] *House Of Wolves* was an outlaw story. This is about the Iron Lords, and it's about nostalgia. It's not about burying the past, but appreciating it, respecting what Saladin did with the rest of the Iron Lords. Even though you know Saladin already — he's a character that already existed — we felt like he had a really rich, interesting story to tell."

It also allows for further gentle iteration on the structure of Destiny as a whole. Felwinter's Peak is the game's third social space, but is unlike the others, which simply appeared as blobs on the Director galaxy map for you to load into. Instead you will first travel to it through a familiar part of the Cosmodrome, then reclaim it from the Fallen. And once you have it, it will change over time, in stark contrast to the Tower and Reef which, aside from the odd themed event, have lain unchanged since the day we first visited them. Felwinter's Peak is home to a mausoleum, with a statue for each of the fallen Iron Lords; at the outset you'll see the fires beneath them go out one by one. Each week you'll undertake a quest to relight one of those fires. It's impossible not to think of Dark Souls III here, and the way FromSoftware's world hubs evolve over time. For Destiny, it shows how Bungie is working, in increments, to improve its world; joining up previously disparate elements, giving life to spaces that felt like static scenes.

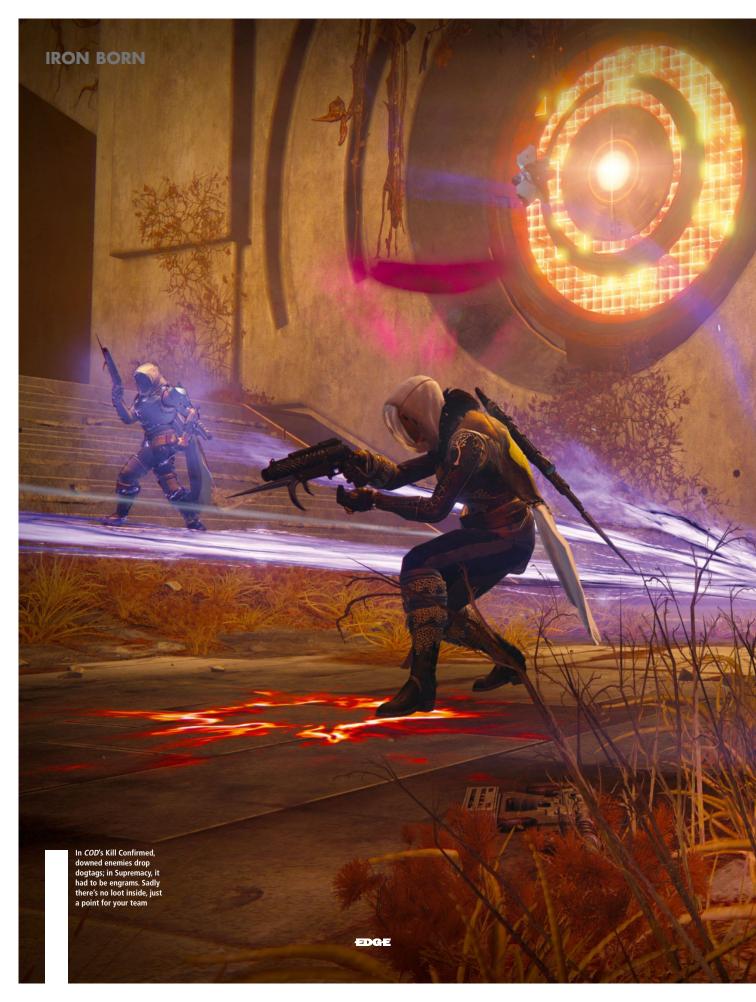
"There's nothing more important," says executive producer **Scott Taylor**. "You establish your high creative goal, and then every time you build something you think, 'How does this tie into that? And how do we do that in a way that feels exciting?' It just makes it feel bigger, elevates it, if you feel like there's been a lot of thought put into how the individual thing you're doing ties into other things. It just feels more intentional, and that's exciting to us."

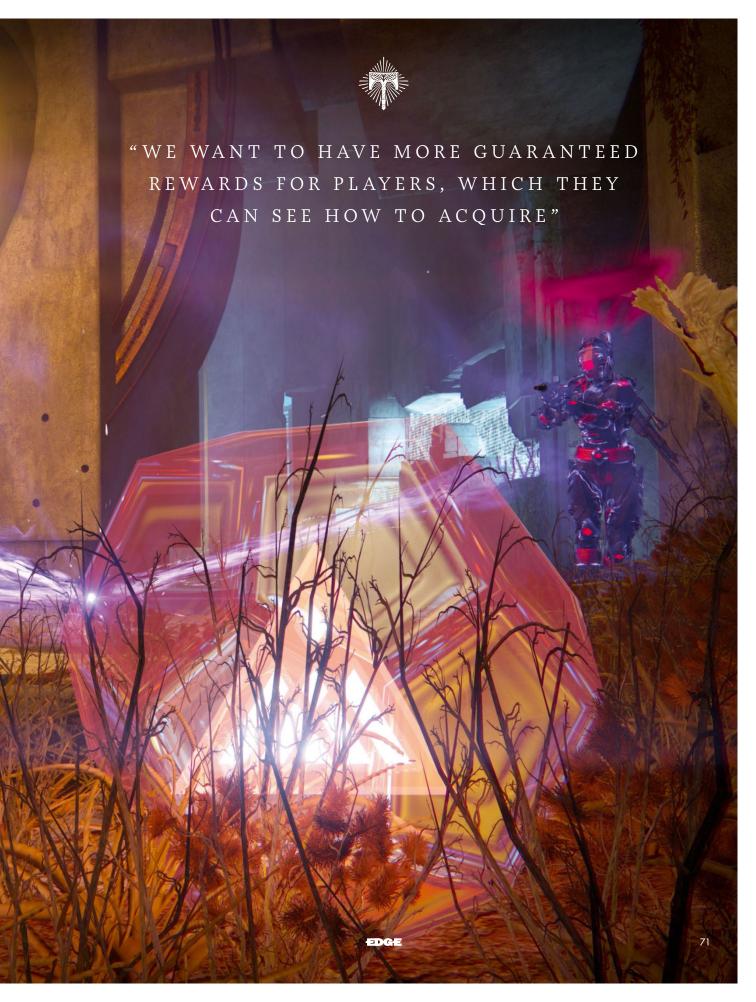
And exciting to the player too, since relighting an Iron Lord's fire rewards you with one of eight new artifacts. This gear piece, when introduced in *The Taken King*, was just another blockade on your route to the level cap. The varieties offered intrinsic

benefits, but they were marginal in nature. Well, no longer. Memory Of Gheleon makes the screen-corner radar, which normally disappears when you aim down sights, a permanent fixture. Memory Of Timur may turn an enemy against their allies when struck with a melee attack. Memory Of Felwinter strips you of your Super, but grants you an extra grenade and melee charge. Some are of more use in the Crucible, others in the PVE component. But you'll be able to choose one of three every week, completing a quest and securing an artifact that will fundamentally change the way you play the game and build your loadout. PVP players, for example, prefer guns with the Third Eye perk, which grants permanent radar; with the Memory Of Gheleon, they can use any gun they want to.

In the build we play – which Bungie is preparing to take to Gamescom when we visit - the artifacts are the major point of differentiation between Rise Of Iron and Destiny as we already know it. Guns and armour offer familiar perks, with only the reborn (but underpowered) Gjallarhorn offering any novelty. However, the final game will offer a suite of new legendary and exotic weapons - and, as in The Taken King, many will be acquired through fixed, properly advertised means, without forcing players to rely on dice rolls. A new inventory item, the Record Book, shows your progress towards a number of different goals, and the rewards that will be given to you when you reach them. It's an idea introduced in The Taken King era - first with the Sparrow Racing League, then the Moments Of Triumph quest, which offers rewards for completing the year's toughest challenges. Rise Of Iron's is there from the start.

"We've fleshed it out much further," game director **Chris Barratt** tells us. "We want to have more guaranteed rewards for players, which they can see how to acquire. Right off the bat we have a full list of some of the major rewards you can get from *Rise Of Iron*. There's a page for the raid; there's a page for the Crucible. The more we can get that stuff in front of the player, and tie it into the story and theme, it all feels coherent and tied together. It's great that we have such a big Reddit community, but one of our goals has been to make it so the game doesn't require Reddit to play, or enjoy it."







"HOW DO WE MAKE PLAYERS FEEL BETTER ABOUT AN EXPERIENCE WHERE THEY'RE WINNING HALF THEIR GAMES?"

If Rise Of Iron feels a little safe in concept compared to The Taken King, it's more a commentary on the fact that there's a good deal less wrong with Destiny than there was this time last year. TTK's many structural changes and quality-of-life tweaks were a solid foundation, to the point that the only real problem with Destiny's PVE component over the past 12 months has been a lack of content — a problem Rise Of Iron fixes by simple virtue of its existence. Yet in the Crucible, things have been rather different.

Destiny's PVP component has had a torrid year of it. Glitches - one that gave the Hunter's Nightstalker subclass an endless supply of arrows during its Super, another that gave players of every class unlimited rocket-launcher ammo - have had Bungie's hotfixers playing catchup to the darker corners of its community. One patch introduced widespread connectivity issues; another left some players able to dish out only a single point of damage to opponents. The Crucible beats to a very different rhythm to the PVE side of the game, which updates and resets every Tuesday. Iron Banner runs one week out of every four; weekends play host to the Trials Of Osiris, a punishing, yet intoxicating 3v3 tournament. However, at times, the problems were so bad that Bungie had to delay, or outright cancel, these pillar events.

"Well, it's a live game, right?" lead Crucible designer Lars Bakken says. "The nice thing is, we get to react and update. But the terrible thing is, we get to react and update! Sometimes you make a change to some system not realising it's going to hit this other system, or this other thing on the other side of the game, in a different part of the codebase. We test constantly — we have an amazing test team, and this is not on them at all. But sometimes, something you can test with 20, 30 or 100 people doesn't become apparent until you have a couple of hundred thousand people playing. Almost all the time, that's what the culprit is. The game's being played at scale and now we're seeing something we could never have tested internally anyway."

Yet while those problems come, get fixed and go, Bungie's matchmaking algorithm has been a more persistent cause of concern. At the core of the problem is a phrase that, in theory, is the multiplayer game designer's wet dream: Skill-Based Matchmaking. Isn't that what we all want? To be put into games with people of equivalent skill to ourselves, so the novices

don't get stomped, and the hardcore get a challenge deserving of their talents? Surely that's perfect?

Seemingly not. Players at the top end of the skill curve were the most upset, since their post-work wind-down sessions were what multiplayer communities call 'sweaty' — every match was a real workout against the best in the business. Worse still, skill level was prioritised over connection quality, so latency reared its head. On paper, skill-based matchmaking is the dream. In practice it has been a bit of a nightmare.

"Look at the skill graph of the *Destiny* population," Bakken says. "There are people who are not very good and people that are so good we don't even understand how. How do you make it so that everyone has an OK time when they're playing? People tell us they just want to be able to make the choice, and we understand that. Sometimes you just want to kick back and have fun. But what does that *mean*? Maybe to the group at the top of the skill curve that means, 'I want to win the majority of my games'. But that's tough, because you're playing against other human players. If your win percentage is 65, 70 per cent — and there are people out there who are like that — then someone out there is on a 30 per cent win ratio. And we don't want that, because they're just going to stop playing. How do we balance that?"

"It's a moving target," Cotton offers. "We keep trying one thing, seeing how the community responds, then trying something else. The thing we're trying to understand, and build systems for, is how do we make players feel better about an experience where they're winning half their games? Because we're not doing a good job with that right now."

Our time with *Rise Of Iron*'s Crucible component is played over LAN, so it's hardly a good testing ground for its matchmaking algorithm. And there's little worth saying about new mode Supremacy, which is essentially *Call Of Duty*'s Kill Confirmed mode, where a felled opponent drops an engram which must be collected for the kill to count towards your team's score. Yet Bakken and co's other innovation will be rapturously received by the Crucible community, since it's been asking for it for a while — and means players can sidestep any future problems with the matchmaking algorithm. Private matches let you set team size, map, mode, time and score limit, and play with people on your friends list.

"Lars and I have worked on the Crucible for a long time," Cotton says, "and we've wanted to do private >



A full fireteam with Gjallarhorns? What is this - 2014? Also returning is the poisonous pistol Thorn, making a new artifact that counters DOT effects essential for the Crucible. New exotics include a pulse rifle with cranium-seeking ordnance, and an auto rifle with selectable fire modes



Lars Bakken (right), lead designer of *Rise Of Iron*'s Crucible, and Steve Cotton (far right), lead world designer





Sadly, Saladin's flaming axe is a Relic, used at certain points in missions (and, it seems safe to assume, the new raid) rather than being a fixture in your inventory. Bungie hints at the presence of other Relics, too

POCKET INFINITY

Rise Of Iron features just five story missions (The Taken King had eight) and a single new Strike, though two others are being remade with Devil Splicers enemies throughout. If that feels slender, there'll be plenty to keep you busy: as in The Taken King, questlines will continue long after the story's over, while the new Archon's Forge arena builds on last year's Court Of Oryx with a series of summonable boss battles. A new of summonable boss battles. A new Skeleton Key item guarantees a reward at the end of a Strike – reward at the end of a Strike – music to the ears of anyone who wasted countless evenings killing Omnigul over and over in the hope of getting the Grasp Of Malok pulse rifle. While the release of the new raid will see the maximum Light level rise to 400, your time with Rise Of Iron will be as much about the aesthetic qualities of your loadout as its numerical power. Shaders will finally affect class items and weapons, while a new item type, Ornaments, allows you to change the appearance of weapons change the appearance of weapons and armour. Fashionistas rejoice.

VISION OF CONFLUENCE

Last year Bungie acknowledged it needed to communicate better with players – not just about the current state of Destiny, but its future, too. One of VP of game development Jonty Barnes' first orders of business when we meet is to confirm the return of Hallowe'en event Festival Of The Lost and Sparrow Racing League, which debuted last December. Yet when we suggest Bungie go even further than that, the PR rep sitting nearby visibly tenses up. "We're constantly questioning whether our plans are the right plans," Barnes says. "Right now!" in thinking about Destiny 2 and the following set of content as the benchmark, but really, Rise Of Iron is changing the way we think about things. You can't get too attached to a plan; we've had to be very non-specific about some of our ideas. We've got ideas from the original Destiny we still want to do one day. Part of the reason we haven't been as forthcoming as we would have liked is there were some pivots. Coming off Destiny 1, the thirst people had for new content... Now we're structured much better, we know what we want to accomplish, and we know we want to tell people about them ahead of time. Those things are coming."



VP of game development Jonty Barnes has been working at Bungie for just over ten years



The legendary guns we're given are no different to existing gear in terms of perks, but the addition of a new friendly faction may change that. All *Taken King* gear can be infused up to the new max Light level



While the Warlock and Hunter variants of the Iron Lord armour are more medieval than sci-fi, the Titan set goes in completely the other direction. That's no surprise: as anyone who's ever been Shoulder Charged round a corner in the Crucible will attest, Titans are an obnoxious bunch



"THIS IS OUR WAY OF SAYING, 'YES, WE UNDERSTAND: YOU WANT TO PLAY IT THIS WAY. WE WANT TO, TOO'"

matches for a long time. But there have been lots of other things we've wanted to do, too: new experiences, new places to go, new game modes. We had to prioritise. This just seemed like the right time."

"The community has already found ways to play with each other without private matches," Bakken says. "It's a really bad experience for them, we know that. We didn't want them to have to keep doing it. It showed they were so invested in the game that they were willing to effectively break matchmaking to try to play together. This is our way of saying, 'Yes, we understand: you want to play it this way. We want to, too."

What Bakken offers backs up what we were told at Bungie's offices this time last year — that this is a studio which understands that *Destiny* can only reach its true potential if it's developed with the wants and needs of its community, not just its design teams, uppermost in its thoughts. That *Destiny* is, and perhaps always will be, a work in progress. The same applies to Bungie itself: while this has been a quiet year for *Destiny*, with no substantial, paid-for content release since *The Taken King*, behind the scenes the studio has changed substantially — in a way that will benefit not just the company but, in the long run, the game to which it has committed a substantial chunk of its 25 years in business and on which it has wagered its future.

Reports last year claimed that Bungie's tools were a major factor in the way that the launch version of *Destiny* failed, to put it mildly, to meet expectations. Sources told Kotaku that lengthy compile times made content creation, or even the slightest of edits to the front end, a nightmare for Bungie's teams. **Jonty Barnes**, the studio's VP of game development, won't say whether that was actually the case. But he does admit that the studio had structural, and technical, problems that held *Destiny* back, that were rooted in the studio's growth from 150 staff on *Halo: Reach* to over 600 now, and a failure to change as numbers grew. Those problems, he says, have been fixed.

"We had one team doing everything, so if we wanted to make disruptive changes to our toolset, we still had to keep the game running. When *Destiny* was growing, we were still one team for too long. There were people who were frustrated because they didn't know what to focus on. Now, we have a studio that's divided into three initiatives. Our first is *Destiny* Main, a large team

of people that's focused on the next major update - I'm sure it's not unknown to you that *Destiny* 2 is releasing next year. We've also built a live team that's responsible for reacting to players and the persistent world; *Rise Of Iron* is [the work of] part of the live team group.

"Then we have the engine team. Their priority — equivalent to a game release — is disruptive technology to improve our development. There's significant opportunity for us to get more efficient in the way we make our games. There are initiatives that will really change the way you experience *Destiny*. And we have a bunch of ideas. We take tools incredibly seriously. But we had to make that separation [of our teams], because when you're in a live environment, you can't make disruptive changes. You're breaking the game."

The engine team's life has been made a little easier, at least, by Rise Of Iron's abandonment of PS3 and Xbox 360 - a well-publicised millstone in Destiny's evolution, since memory limitations on the previous generation of consoles made it hard for Bungie to offer PS4 and Xbox One players increased inventory space as new expansions expanded the gear pool. Our suggestion that it must have been a difficult decision falls a little flat - while it wasn't the case at Destiny's launch in 2014, currently fewer than ten per cent of players are on what Bungie calls 'legacy consoles'. Those on 360 or PS3 who are up to date with the game and its expansions will be able to make the switch to newer consoles for a knockdown fee; beginners, meanwhile, can get up to speed with The Destiny Collection, a retail bundle of all content up to and including Rise Of Iron, for the equivalent price of a new game.

Yet compelling as that offer may be, this is not the \$60 Bungie product we expected to be on shelves this year. Our visit to Bungie merely reinforces the sense that *Rise Of Iron* is a hand on the iron tiller; while last year we had virtually free reign at the studio, here we are confined to the ground floor, a carefully planned studio tour ensuring we see no more than we are supposed to. Still, there's plenty to be excited about in *Rise Of Iron*: new things to see, new things to shoot and toys to shoot them with, a new raid, a long-requested PVP mode. A greater sense of coherence to the way it is all knotted together. And, of course, Gjallarhorn. But throughout there will be the lingering sense that something else − something bigger − is on the way. Winter is coming, then, but perhaps not this year. ■







Sixteen new IPs feature in Year Two, a diverse set that includes icons such as Gremlins and Harry Potter as well as lesser stars such as Beetlejuice

ere's a clutch of nugget-sized, quiz-ready facts about The Lego Company: 1 The Lego Company is the largest producer of car tyres in the world: 318 million (more than 870,000 per day) roll off the production line each year. 2 That production line, housed in a kilometre-long factory in Billund, Denmark, rattles unceasingly 24 hours a day, 365 days a year. 3 It was 17 years before the company, founded in 1932, produced its first plastic brick. Before then it mostly produced stepladders, ironing boards and wooden toys. 4 The name Lego derives from the Danish phrase 'leg godt', meaning 'play well'. 5 In 2003, the company teetered on bankruptcy it was selling many Lego kits at a loss while the company's name had, to its board, at least, lost the original meaning. 6 By 2015, so many filmmakers wanted their IP to feature in Lego Dimensions that the game's developer had to start building worlds and characters before the contracts were signed.

In the centre of a flowerbed outside the front doors to The Lego Company's headquarters in pancake-flat Billund, Denmark, stands a giant yellow Lego brick (a two-by-four, naturally). On a grey morning in early 2012, **Jonathan Smith**, head of production at TT Games, the Cheshire-based studio that has, since the mid-2000s, been responsible for a collection of billion-dollar-profit-making Lego videogames based on various megawatt IPs such as Star Wars, Indiana Jones and Batman, walked past the brick for the umpteenth time. He was headed to a routine meeting, the kind that he attends every couple of months, to discuss new ideas with the Danish, who remain intimately involved with every aspect of the British studio's work, even occasionally loaning their own kit designers to lend a hand on its games.

During a coffee break, Smith's phone rang. He stepped outside of the office, into a corridor lined with the orderly, grinning photographs of Lego employees who have worked at the factory for 25 years or more. **Jon Burton**, founder of TT Games,

was on the line. Burton had been wrestling with the problem of how to bring the world of physical and digital Lego closer together for years. Sure, his games allowed players to press a button and turn a pile of bricks into a rocket ship with the sweep of a Jedi minifig's palm, but they've always struggled to replicate Lego's elemental appeal: the reassuring click when squeezing two bricks together.

Burton explained to Smith that over the weekend he'd been playing *Skylanders: Spyro's Adventure*, a recently released game in which players place plastic figurines containing RFID chips onto a platform connected to a console to conjure them into the game. "This is how we do it," Burton said. Smith returned to the meeting and relayed the message. Lego was, Smith recalls, immediately taken with the idea. "It felt like destiny," he says. "All the ideas, speculation and possibilities we'd had across the years had, at that precise moment, coalesced into an imperative for action."

Back in wet and leafy Knutsford, a skunkworks team within TT Games started work on a prototype, based on the original Lego Star Wars game, using a jury-rigged controller and a PlayStation 3. Whatever form the final design of the Toy Pad took, Burton was adamant that it would need to play more than a supporting role in the game itself. "If all this thing does is make the character appear on the screen then we're just building an elaborate 'Start' button," he would tell his team. "We already have one of those." Rather, Burton wanted the Toy Pad to open up new possibilities for play. "Jon was always coming up with new ideas, experimenting, discarding, and discovering new solutions," Smith recalls. "Every possible mechanism for enabling Lego toys to interact with a PS3 was explored. The conceptualising was incredibly expansive."

Some of the Lego master builders – the title given to Lego experts who are able to build complicated structures without plans – who work at TT Games began to prototype some designs, according to a

TT Games includes many leading lights in the Legobuilding community. The office is studded with their creations, such as this Tardis scale replica



"ALL THE IDEAS WE'D HAD ACROSS THE YEARS HAD, AT THAT PRECISE MOMENT, COALESCED"



Year One's characters will meld with Year Two's. Feed Gizmo the Scooby Snack from the Scooby Doo Pack, for example, and he will turn into a Gremlin

COLOUR ME GOOD

By the time game director listsoughtn joined the team, the specifications of the foly Pad had been mostly finalized, but the way in which these capabilities could be used to create play had not. "We had ideas end some worked better than others," he recalls. "There was a rhythm action section, but that didn't work well in testing," in the end, most of the mechanics used the base's unique colour-switching capabilities. "Everything was developed with colour in mind," McLoughin says. "Colour allowed us to create puzzles around colour mixing, and to early link colours to different elemental abilities. Without colour, a lot of the game's features would have been far learder to pull oft."









FROM TOP Jimmy McLoughlin, Mark Warburton, Jonathan Smith and Arthur Parsons

loose definition of the device's proposed shape and the required capabilities. The hot-spot at the centre of the Toy Pad, used for programming the tags to tell the console when, for example, Homer Simpson's car has been refashioned into a more powerful submarine, was in place from the beginning. "With the exception of a few tweaks for usability and to aid build costs, the original design is pretty much what we ended up with," Burton explains.

As the team looked at the ways in which the Toy Pad might be used in creative ways to affect gameplay, Burton began to compile a document outlining all of the different universes he wanted to draw together under the umbrella of this game. "I'd just finished *The Hobbit,*" says **Jimmy**

McLoughlin, game director on Lego Dimensions.

"Jon emailed me and said, 'There's a secret prototype we've been working on'. Then he passed me his document. I remember opening the page and the first image was a cluster of logos: Lord Of The Rings, Batman, Dr Who, The Simpsons, Back To The Future. I remember thinking, 'You can't be serious?' It was something else. It was one of those projects that I felt I'd been born to make."

Mark Warburton, producer on the game, had a similar experience. "Jon said to me: "When you put toys in a box they're all mixed up together. Why can't we do that with Lego?" I thought it was a joke when he told me we'd be working with Valve, the BBC, Fox and all these others. I thought he was winding





The most unusual inclusion within Year Two's lineup? It's hard to beat Tom Cruise's Ethan Hunt character from the Mission Impossible series

"SO MUCH OF WHAT WE GET PERMISSION TO DO COMES FROM PEOPLE'S AFFINITY FOR AND TRUST OF LEGO"

me up." For McLoughlin, that initial thrilling jolt of intrigue and wonder became a rallying memory. "Halfway through the project, when things were tough and days were dark, I'd remember the reaction I'd had on that first day," he says. "Everyone was going to have that experience. It kept me going."

In fact, the idea of a mashup between scores of different film and television series had been seeded at TT Games years earlier. 2006's Lego Star Wars 2 had a secret level featuring Indiana Jones, while numerous Star Wars characters appeared in 2008's Lego Indiana Jones: The Original Adventures. "We were flirting with this approach long before people were using terms like 'mashup'," Smith says. Still, this foreshadowing didn't lessen the impact on the audience that McLoughlin had anticipated. When the team first began showing the game off to children in the months leading up to the game's launch, their reaction was memorable. "There was a Lego brick show in London," Warburton says. "There was a sea of children at this presentation. I realised they'd stopped listening to me. They were fixated on the screen, where Batman was driving through Springfield in the Mystery Machine. That's when I knew we had tapped into something. They were seeing onscreen what they do in their bedrooms with their toys."

Whenever a new employee joins TT Games, they come with a clutch of ideas for which beloved film or TV series could work with the Lego treatment.

"It's not that we couldn't make a Lego Dr Who or Back To The Future game," Smith says, "but we have made choices about the one or two big games we make each year. In the meantime, everyone has so many ideas because Lego can be anything. There are too many ideas. Lego Dimensions became the place where much of that energy could be directed."

Compiling a dream list of IPs to work with is one thing; wrangling the legal signoffs is quite another. But when it came to approaching the various IP holders, the conversations were remarkably smooth. "Lego carries so much weight," Smith says. "So much of what we get permission to do comes from people's affinity for and trust of Lego. They have a relationship with the toy from their childhood and their children's relationship with the toy. We make sure it's the first word we say when we sit down. Immediately they're listening attentively. Then, of course, we only approach people whose work we care for and are fans of. That brings the assurance we'll be treating what they have made with care, attention and love."

Once it's convinced a potential partner, however, TT Games has the gnawing issue of how to ensure that, for example, the BBC is happy with the way in which Dr Who rubs shoulders with Homer Simpson, or that Warner Bros can see that Gizmo is getting a comparable amount of screentime to Doc Brown. "Concerns about mixing characters is again where Lego changes the rules," Smith says. "It's the universal solvent. We're now in the Lego world. It creates a





The game is filled with nods to fans of the films it replicates. If The A-Team's Mr T climbs inside any flying vehicle, for example, he instantly falls asleep because he hates flying



"NOW WE HAVE SONIC THE HEDGEHOG DRIVING AROUND ON THE HOGWART'S EXPRESS THROUGH BREAKFAST LAND"



space that almost everyone leans into and gets excited about. Those distinctions between properties and brands don't exist in the minds of children. The partners end up feeling the same way."

It's a logical sell, but even so, TT Games often finds itself tussling, both internally and with stakeholders, about specific lines of dialogue, or animations, and the question of whether they are consistent with the character, even in their cartoonishly warped Lego incarnation. "Of course, people who care deeply for these characters have a responsibility to make sure we haven't gone crazy and are taking them in ways that aren't authentic to the way the audience would recognise," Smith says. "There is back and forth with licence holders - some more than others - but it often depends on how far we're pushing things, how surprising or transgressive our representations feel. We have endless esoteric conversations over certain words or certain animations that would seem absurd to an outsider, but are always important in the precise context."

In the majority of TT Games' Lego titles, players collect studs, which are used as a currency to buy new characters and thereby gain access to new abilities that unlock the world. This design no longer works in *Lego Dimensions'* model, which requires players to buy new characters using real-world money. Some have criticised the approach, arguing that it places sections of the game behind gates that can principally only be accessed with an expensive trip to the supermarket or toy shop.

"It was tricky to get he balance right but we had a rough idea of what we wanted people to feel with the vanilla pack," McLoughlin says. "We made sure they could play through two-thirds of everything without making any additional purchases. The vanilla playthrough is about 21 hours." **Arthur Parsons**, a senior designer on *Lego Dimensions* Year Two, is quick to point out that it's possible to unlock everything in the game using the 'hire a hero' feature, which allows players to purchase 30 seconds of playtime with any character in the game, enough time to get past most ability-specific puzzles.

"It's also like test-driving a car: you can try out these characters for a bit before buying them," he says.

It's arguably a risky design because, in allowing players to spend some in-game currency to play as any character for a limited amount of time, it could undermine the need to buy character packs. "That's not how we thought about it," Smith says. "If we start chipping away and make extra requirements and financial demands on our players, tricking them into buying extra stuff, we would've created an experience that was compromised and in bad faith. We weren't going to overturn the promise of value that we've worked hard to build up over the years with games full of surprises. You buy the figures because the figures are brilliant and you get lots of excellent new things."

Undeniably a huge number of players agree with Smith's assertion. As well as videogame players, lego collectors have bought the packs en masse, in part because many of the minifigs, such as The Wizard Of Oz set, are only available via lego Dimensions. While Disney recently announced it's ceasing production of Disney Infinity, one of lego Dimensions' main toys-to-life rivals, production on lego Dimensions 2 has doubled in size in many areas, with more than 200 staff working on the game, including two game directors, two separate design teams, and three designers dedicated to upgrade trees. It's fan service at an industrial scale.

The business model also provides TT Games with novel insight into which packs and abilities prove most popular. "Certain brands are more popular in certain regions," McLoughlin says. "Lord Of The Rings is massive in Germany, but not so much in the States. Ninjago is very popular in the EU, less so in the UK. There are fan favourites on a per country basis." Like all Lego, the packs are comparatively expensive to other toys. To help improve the sense of value in year two, every pack will contain unique digital content, Parsons explains. Even so, many of the packs in year one sold well despite not having a unique digital prize. "Emmet sold very well, for example," Parsons



While many of the game's unique LEGO models are designed using digital tools, the studio keeps a vast collection of bricks for inspiration



explains, "but you already have access to The Lego Movie hub thanks to Wyldstyle. "I think, in the end, people buy from films they like and relate to."

A disproportionate number of those films appeal to much older players than those who principally play Lego games. With Year Two's selection of offerings drawn from the '80s, bringing together The Goonies, Beetlejuice, Gremlins and ET, this focus on the nostalgia factor for parents rather than children is even more apparent. For Warburton, it's all part of what makes the games appealing to the companies that lend their characters to the universe. "It's introducing a younger generation to these films," he says. "Many young people got their introduction to Star Wars and Lord Of The Rings through the Lego games. It's an instant, easy barrier to get into them.

"I remember looking over someone's shoulder during production and thinking: have Batman and Gandalf really just dropped onto the Simpsons couch?" Parsons says. "And now we have Sonic The Hedgehog driving around on the Hogwart's Express through Breakfast Land. You look at screenshots and think it's been Photoshopped." To critics who would say that the game is all celebrity and no substance, McLoughlin is unequivocal. "We have more than 60 unique mechanics in the game now," he says. "It shows the breadth." For Parsons, who has worked at TT Games for 17 years, no matter how broad and desirous the cast of Lego characters in the game, it's just one aspect of what makes the company's games so successful. "No matter how long we've been here, we want every game to advance on ten different fronts, just to ensure the perception is that we have, at the very least, advanced on one or two fronts."

Despite the slow decline of *Skylanders*, and the total demise of *Disney Infinity*, TT Games appears not only positive but positively ebullient about the future of its game. Whatever happens, the company has added a new Lego fact for quizmasters to snatch: *Lego Dimensions* will be the first game to settle the old question of who would win in a fight between Harry Potter, Lumpy Space Princess and Mr T.



SQUAD GOALS

Choosing the three starting characters in the game - Gandalf, Batman and Wyldstyle - wax a fond and ardioous process. The team went through numerous different configurations, some of which included Lord Of the Rings' Legalas, DC Comics' Superman and even Batman Wilain Harriey Outini. "We needed three strong and different characters for both mechanical and storytelling purposes," Persons explains: "The personalities need to be complementary one old, one slow, one funny, one fighty and so on." Eventuelly, ofter taking numerous surveys with players, the team settled on the core trio, which mimics that of the 2014 Warrier Error film. The



MANKIND

AVAILABLE 23.08.16



SECURE THE DAY ONE EDITION

TO OBTAIN ALL OF THE ITEMS BELOW



COVERT AGENT PACK



DIGITAL OST SAMPLER



EXTRA IN-GAME MISSION



DIGITAL BOOKS

BUY THE SEASON PASS TODAY AND EXPAND YOUR EXPERIENCE





















AN AUDIENCE WITH...

HIDEO KOJIMA

Life after Metal Gear: the Japanese auteur on games versus films, and new beginnings

BY SIMON PARKIN

Photography Richard Ecclestone



uch is the level of paranoia surrounding the venture that, seven months after the founding of Kojima Productions, the independent studio won't confirm, even off the record, how many staff it currently employs. The team is worried. It's clearly been a bad breakup as far as Konami, **Hideo Kojima**'s employer of more than two decades, is concerned. There are concerns about litigation. Some team members refuse to be photographed; they don't want people knowing where they work.

Kojima, meanwhile, has never looked better. Even while labouring under 12-hour jetlag he looks bright and far more youthful than his 52 years. The elbowy title of his new game, *Death Stranding*, has been announced and, while the director is unwilling to discuss precise details, it's clear he's assembled the team he wants to work on the project he wants. "No questions about his previous games please," his faithful PA — who fled Konami with her boss last year — says at the start of the interview. Kojima, it seems, has moved on. But to where?

The past year has been a time of great change and, presumably, drama in your life. How have you managed to remain so calm and focused throughout all of the turmoil, especially while trying to set up a new company?

Well, when I was still working on *Metal Gear Solid V* there was a great deal of pressure to finish the game. So I was completely caught up in that act of creation. Then I immediately moved on to setting up a new company and thinking about what would be next. I had to come up with a new idea. So there was no break. I guess that activity is what has kept me going — a constant focus on creating. Without that, it would have been a lot tougher for me, I think. I had to keep looking forward. I couldn't look back. That's what has brought me to where I am today. On reflection, I think it was wise that I didn't take any time off.

What have you learned through all of this that you wish you'd known at the start?

I tend not to be a person who has regrets, or who wants to go back and change things. Everything happens for a reason. That's all I've got.

Was there ever a point in the middle of all this when you considered simply leaving videogames to do

something else entirely? Was there space enough for the thought to cross your mind?

I would definitely like to make films one day. But making games is enjoyable. I want to keep doing it. I never really considered making a smaller-scale game because, in truth, I want to make blockbuster games where I put everything in. Now, had I only had the option to make a very small game then, in all probability, I would have left the industry altogether — I would have gone to make a film instead.

You've started off with a small team that you're now growing. How did you pick those first team members? What were the traits you were looking for?

Usually, when I finish a large project, the team members all take long vacations. During that vacation period I'd typically take time to consider what I was going to do next. I need to work alone during this planning phase, so it's always worked well in the past. That process was compressed with this project. Even before the studio had any computers or equipment, I started going back and forth with [longtime collaborator] Yoji Shinkawa to go through the design ideas that I had.

We ran some tests and experiments. I hired people who I knew would be suitable for those specific tests. One thing that is very different from how I did things before is that I can do things at my own pace and rhythm. Before, I had the pressure of having to assign 200-odd people work the moment they came back from their holidays. That was always difficult. Now I can work at my own schedule. I can interview people one by one for very specific roles, and expand the team in this way. It works a lot better for me. For example, when it comes to the sound in games and film, you only need to hire people toward the second half of the project. At Konami I would have to find the sound team work before we were ready for their involvement. Right now I am only getting people in for these kind of tasks when I need them. It's much more flexible.

It's obvious from looking at your previous projects that you believe in the power of games to say something meaningful about the world to players, perhaps even to educate them. What is the message of your next game?

I can't answer that quite yet. But what I can say is that I want to explore the connections between people. I want to return to the idea that the road is one of the first



AN AUDIENCE WITH...



 $\mathbb{C}V$

Kojima's early exposure to film has been widely reported: his father would pay for him to go to the movies alone, on the proviso that he buy the programme and discuss the film upon his return. These cinematic roots are not apparent in the designer's earliest work. After successfully completing his first title - an action game called Yume Tairiku (Penguin Adventure, in Europe) - Kojima became lead game designer on wrestling title Masked Fighter. Shortly afterwards the game was turned into an Indiana Jonestype adventure titled Lost World. After six months of work, this project too was cancelled. It was a blow that led to Kojima being assigned to the game that would become the first Metal Gear, which he redefined as a stealth infiltration game. While Kojima is best known for this long and storied cinematic series, there are other rare jewels in his oeuvre, such as the cyberpunk adventure games Snatcher and Policenauts, and Boktai, a handheld game that uses solar energy to charge the protagonist's gun.

tools that humankind invented. I want to explore more about this idea of connection, and the various ways in which we are brought together.

The world as a whole is experiencing chaos and upheaval right now, not least in terms of the political climate, which is a theme you've returned to many times in your games. What role do you believe a game director can have in speaking to real-world issues, or helping us to reflect on the world's problems?

That will depend on each person who makes a game. In my case, movies and books have enriched me so much, and given me things that I've been able to take and use in my daily life. That's why I want my games to carry a message. It's important to me that my games aren't only 'fun'. I want them to carry a message or kernel of something that players can take and use. That said, I don't think all games need to be this way. That's what I mean when I say that it's going to come down to the individual creator.

As well as these serious themes — including, recently, human rights abuses — your games have a slapstick sense of humour and, at times, anime-style overstatement and irreverence. It's been argued that the latter elements undermine the former in your work — how do you respond to that?

When it comes to the messages that I put in my games and the humour I put in my games, I think about them as existing on separate levels and in different ways. When people play games, it can be almost like work. There is toil and effort involved. If the work is too dark or stressful or if you put too much pressure on the player, they will just stop playing. Films don't have this problem. A director just needs the viewer to sit down for two hours and allow the work to wash over them. Games are different. People come back from school and their jobs and they have to be motivated to keep playing.

It seems like a small consideration but it's important; it factors a lot in the design. For example, if you have players shooting one another for a long time, they'll start distancing themselves from the world. When you add in humour and change the heavy atmosphere, it creates waves of different feeling and emotion, so that the player can keep playing and coming back. But in the end, when the player finally steps away, I want them to realise that there were lessons in there.

You're clearly a David Bowie fan; his work runs through yours. What were you doing when you heard that he died? How did it affect you?

A new song, Lazarus, had just come out. It was the weekend. I had time off with my son. There was a limited-edition T-shirt released that I didn't buy at the

"I TEND NOT TO BE A PERSON WHO HAS REGRETS. EVERYTHING HAPPENS FOR A REASON. THAT'S

time, something I regret now as I can't find one anywhere. I was reading Twitter. I started seeing rumours that maybe Bowie had passed away. I didn't want to believe them, so I didn't. That kind of false information about a celebrity dying happens often these days. Then I saw Duncan Jones tweet that his father had passed away. That's when I knew that it was real. It was shocking. I didn't want to believe the news. Had it been a weekday I would have been surrounded by people in the office and I would have been surrounded by people to process what had happened. But it was the weekend and I was with my son. I couldn't have a discussion with him about what had happened. It was difficult.

Like Bowie, your name transcends your work, or is at the very least as well-known as your work. It's also in the title of your studio. How much pressure does that celebrity status put on you, especially now?

I don't think of myself as a celebrity, so I don't feel pressure in that sense. I'm just a regular person. David Bowie was a star. I'm a person who makes things, sometimes with stars. It's a different situation. I think of myself as something closer to an author. With books, the novels are the stars much more than the novelist is a star. But yes, there are moments when I'm treated that way. It's always troubling, for example, when I go into bathrooms and wash my hands and then someone comes up to me to go to shake my hand. That's always awkward.

With the *Metal Gear Solid* series you had a core design which over the years you've been able to evolve from that relatively small set of rules. What has your process been for finding that kind of core for your next game?

I don't think I've ever gone looking for a core, as you describe it. Some ideas just keep popping. Some are instinctive. I test theories in my head. Then I break them down and rebuild them. This doesn't quite answer the question, but it's an accurate reflection of my process. Death Stranding is a new title, so when I'm planning, or imagining, the game, there are aspects that make it





AN AUDIENCE WITH...

"WITH THIS NEW COMPANY I'M NOT MAKING IT WITH THE IDEA OF GROWING IT INTO A HUGE OPERATION"

freer because it's not a sequel. But the process itself is very similar to how I've always worked.

Fumito Ueda said recently that starting GenDesign allowed him to focus on the creative side of gamemaking again. Have you experienced similar benefits since going independent with Kojima Productions?

Well, I'm setting up a new company, so there are inevitably some administrative aspects to my day. But the key difference is that I only have to look at what I'm making, or my own organisation. Before, I had to also consider the overall direction of the company. I don't have to do that any more. I don't have to attend meetings that have nothing to do with what I'm making. That definitely feels better. With this new company I'm not making it with the idea of growing it into a huge operation that grows and grows over the years. At this difficult time I just want to make a great game. I want to set up a place for people who join me to make one good game. I'm not sure if that's exactly the same as Fumito's experience right now, but that's where I'm coming from. If this is successful then we'll start thinking about what's next. I don't have a long-term plan beyond that.

The model you're pursuing seems closer to a film production company. For example, JJ Abrams has Bad Robot as a kind of creative lab that comes up with ideas and then shops them around to studios.

Yes, it's something very similar to that. Bad Robot Productions specifically has been a big influence.

In games there are fewer auteurs than in film. You are one of the few. Do you think the game industry would benefit from having more individuals bringing a singular vision to their games, even if, ultimately, teams of hundreds then execute those games?

I'm not that sure if it would necessarily have a positive impact. Even in film, auteurs are rare now. In my day we had Hitchcock and Carpenter, and whenever you saw the associated name you knew it was going to be something



special. I don't think that's the stance of the current generation, however. The model is changing.

It's been a period of great reflection for many creators in games, film and TV about representations of women and gender. How has your own understanding and approach to this issue evolved over the years?

In the case of JJ Abrams, he's extremely sensitive to this topic, so we now have, for example, gay people appearing as central characters in Star Trek. In my case, I don't want to put things in my games just because they're 'trending' issues; I want to only put them in because I judge they're necessary for the story I want to tell. That's not to say I'm not listening. It just means I'm not going to put them in the game to be tokenistic. The risk, otherwise, is these decisions become a marketing exercise. I don't want to be led by marketing with regard to having to make every character a certain gender or race. I want to be led by what I want to make, by what is right for the story. I'm happy to be open-minded during that process. That's the way this should be approached, I think.

Pokémon Go became an unexpected phenomenon recently, and you have some experience of 'outdoorsy' videogames with your 2003 game, Boktai. How do you feel about AR right now?

Yes, that's true. The concept of taking elements from your surroundings and reflecting them in the game is something in which I've always been interested. Not only Boktai, in fact, but also MGS: Portable Ops and Peace Walker had similar features. It's all coming together for AR right now: the technology, the market. It's not something that is necessarily new, but it's something that, thanks to a convergence of technology and access, is having its moment. I think everyone expected VR would come first and then AR would arrive much later. But it seems as though, against all those expectations and with the help of cellphones, AR will come to dominate before VR even has a chance.

The Kojima-produced Boktai, released on GBA in 2003, incorporated a sensor that encouraged players to go outside and feed it with light

M A K I N G
O F . . .



CALL OF DUTY: FINEST HOUR

From mass resignations to corporate lawsuits, Call Of Duty on console had fraught beginnings

BY EDWARD SMITH

Developer Spark Unlimited Publisher Activision Format Gamecube, PS2, Xbox Origin US Release 2004

cott Langteau couldn't believe what he was hearing. He knew DreamWorks Interactive had changed - since Electronic Arts acquired the studio two years prior, the working weeks had grown longer, the upper management a lot more hands-on. As Langteau perceived it, the DreamWorks family, which he oversaw as a producer, had been split up and destroyed. To a point, it had been tolerable. Long hours, especially as a release date drew near, were a reality of game development. And Medal Of Honor: Frontline, the title DreamWorks was developing, was expected to be a major hit. Of course EA would drop in occasionally and check on its investment. But this was too much: standing in his office, looking across at his executive producer, Langteau knew his days at DreamWorks were over. "It was just a few weeks before Frontline went into manufacturing," he explains. "And this guy, who will remain nameless, came to me and asked, 'Is this game even going to be any fun?' I looked at him and was just so upset. I didn't say it, but in my mind I was thinking, 'You don't know what you have here. You have no idea what you're playing.'

With working conditions in decline and corporate interference becoming more frequent, Langteau, accompanied by several Frontline staffers, decided to break off and start a new studio. It was February 2002. "A lot of us had realised what it meant to work for EA," he says. "Gruelling labour: 16- to 18-hour days, six days a week. We didn't want to do it any more. So Michael Giacchino, who'd composed Frontline's score, put us in touch with producer Craig Allen. He knew how to go out and sell a team, and say to publishers, 'These guys have done this and are looking for a breakout - would you like to fund something?' A number of publishers stepped forward, but when Activision contacted us and said it was looking for a 'Medal Of Honor killer', that's when we got started."

Thus, 28 of *Frontline*'s development staff resigned en masse one Thursday afternoon. A lawsuit was filed, claiming the former employees had copied *Medal Of Honor* art and sound assets and were planning to use them in their own games. With Activision's support, Langteau and co were eventually able to settle.

In the meantime, another of Activision's subsidiaries, Infinity Ward, relocated from Oklahoma to Encino, California. Headed by



At five o'clock in the morning, Spark team members sit down with an early build of Call Of Duty: Finest Hour

other former Medal Of Honor developers, Jason West and Vince Zampella, Infinity Ward was working on the first Call Of Duty, to be launched on PC. Activision wanted a console equivalent. To create COD: Finest Hour it set up Langteau and Allen's new venture, Spark Unlimited, a few miles away in Santa Monica.

"THIS GUY CAME TO ME AND ASKED, 'IS THIS GAME EVEN GOING TO BE ANY FUN?' I WAS SO UPSET"

During Finest Hour's development, Spark would balloon to more than 100 employees. But Tony Rowe was one of the original 28. A veteran level designer of both Medal Of Honor: Frontline and its PS1 predecessor, Underground, his was a belt-and-braces job: creating a bigger, better WWII game from the ground up. "We had to be better than Medal Of Honor, otherwise what was the point of all the hard work?" Rowe says. "The biggest change we wanted was to show the war was fought by more than one person. Most gamers of the era found themselves in the boots of the same American and British male heroes again and again, but the war was fought by many different people of many different backgrounds. This would be WWII as experienced by all the major Allies. In the Russian campaign you'd be accompanied by a female sniper. There was a Libyan ally fighting with you in the North Africa

campaign. And the American missions centred on the Black Panthers, the 761st Tank Battalion, an all-African-American armoured group from when the US military was still segregated."

To create so many different levels, Rowe and the other designers would work independently, finding their own historical research and creating initial drafts for each section of the Finest Hour campaign. "The missions were divided evenly among the team based on skills and interests," he says. "For example, one of our designers, John Castro, always added nicely animated ambient background objects like bobbing sea planes on coastal waters, so he often got levels that suited those kinds of elements. We'd break off on our own to study the history we were recreating and take a first pass at the story beats for each level. After that, all the designers would get together and discuss how to improve the preliminary versions of each of the levels, maybe things like altering the pacing or adding explosions. A concept artist would create storyboard images for the big or complex moments while the animation and audio teams added notes about assets they would need."

However, RenderWare Studio, the engine Spark had chosen – against the advice of Activision – proved slow and sometimes incapable of handling *Finest Hour's* complex levels. "We were using the game editor for more complex tasks than it was ever designed for," Rowe explains. "It could take half an hour or more just to start the software. And Lord help you if it crashed, which it often did."

Designers, rather than focusing on their own sections of Finest Hour, were crossing between levels, helping each other. The division of labour was becoming less clear and, as more and more staff trickled into Spark, Langteau began to question what the studio was creating. "Medal Of Honor was all about truth and authenticity." he says. "We always loved, and did right by, the veterans. And that was true to an extent on COD, but also, we were trying to build a Medal Of Honor killer and had to work out what that would mean. Our conversations with Activision were about how to make it more fun, make it bigger and better, how to get more fans. We were trying to launch a franchise and had to be careful not to harm the name.

"The first playable character in the game was originally Tanya Pavelovna, the sniper

THE MAKING OF...

from Stalingrad. But Activision refused to open a firstperson shooter with a female character. We cited other successful games such as our own Medal Of Honor: Underground and the obvious Tomb Raider, but they feared a loss of sales to young males and wouldn't budge. We had to design a new character just for the first level."

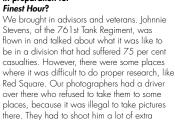
When the 28 Frontline developers resigned and formed Spark, it was to escape the auspices of an interfering publisher and continue producina credible war games. Now the studio and its founders were back where they started, working long hours, under a demanding publisher that was telling them to keep up with Zampella and West. The relationship between Spark and Activision was beginning to break down. "Activision was very collaborative and helpful until things got rough," Langteau says. "It's a big company, and it had a lot of money invested in us, and eventually the thumb would come down, and people would start saying, 'You promised this and we want that.' We were already coming off a gruelling schedule on Frontline - we'd started Spark only weeks after leaving EA, and there'd been no downtime. There wasn't a lot of sympathy about that, even though people's marriages were falling apart and they weren't seeing their kids. On the weekends, Activision had representatives who would drive by our offices to see how many cars were in our parking lot. There was a lot of pressure."

Concerned that Finest Hour was falling behind schedule and below standard. Activision sent dozens of its own programmers and designers to Spark's offices. In the meantime, the GameCube port was farmed out to another LA studio. Exakt Entertainment. Compared to how he'd started, as a designer drafting his own visions for Finest Hour's levels, Tony Rowe was in a very different position. "Most of my level building work was on the first North African mission," he tells us. "It was meant to be a quiet, stealthy level about meeting a contact and slipping past the Germans undetected, but none of that worked, so I redesigned the mission as a surprise raid on a German outpost and fuel depot. I added a battle with a half-track and some panzers; a machinegun strafing run, by your squadmates in their Jeeps, rounded the experience out. To help with those missions, Activision brought in designers from Shaba, a studio in San Francisco, and Treyarch. We were appreciative to have the outside assistance – without it, the second Africa

Q&A

Scott Langteau

What sort of historical research did you perform in preparation for



Did you have to cut anything substantial in order to meet milestone deadlines?

money to get to where they needed to go.

Yes – whole levels were cut, and it was heartbreaking. There was one background artist who'd worked on this one level all the way up to the end – it was textured, built, there were enemies in it. But we just had to cut it, and cut his work. He was devastated, because that was basically all he had worked on.

Given your experience, why do you think games end up going over budget and time?

When you're looking at something once a month it's easy to say, "We should add this' or, "Wouldn't it be cool if we had that?" Then you get to a few months before launch and there are features that still haven't been designed or haven't been coded, and you start thinking not about what you can add but what you'll be able to finish. It's more viable to cut features and levels than to add more staff. These are decisions that always happen, but publishers are never happy about them, and rarely will they admit that they had a role in it.

mission would've been cut – but little did we know we were training our replacements."

In 2002, Spark had signed with Activision to produce three games: a console *COD* followed by, potentially, two sequels. By November 2004, and the release of *Finest Hour*, that deal was in doubt. *Finest Hour* enjoyed mostly positive reviews, and decent sales, but the relationship between developer and publisher had long since soured. What was once a hopeful partnership became a protracted legal battle. "After we finished, I took a much-needed vacation to Hawaii," Rowe says. "Upon my return, I learned Activision was no longer working with our studio."

"I don't think anybody felt they had made the best game they could have," Langteau continues. "I think there was a sense of, 'We had to cut a lot, we had to shape a lot.' But ultimately it was fine. We did a good job. However, after we had delivered the final game, Activision just kind of left. Our final payments and royalties didn't materialise, so we filed a grievance suit."

Spark contested that it hadn't received the money owed for completing *Finest Hour*. Activision countered, claiming royalties had been cut to cover the cost of additional development—it even claimed Spark had represented itself fraudulently by claiming it had the talent and experience to create a triple-A console game in the first place. In 2007, after two years of legal jousting, the two companies settled out of court.

After splitting from Activision, for three months Spark's staff worked on concepts and pitches, accepting in lieu of wages a stake in what the company might one day become. Through Codemasters, it released a war shooter, Turning Point: Fall Of Liberty, in 2008. Another shooter, Legendary, followed eight months later, then Lost Planet 3, the final entry in Capcom's thirdperson shooter series. In 2015, after 13 years in business, Spark closed.

Langteau left the company in 2008. He now writes children's books and occasionally works on movie scores with his old friend Michael Giacchino. "On Finest Hour, we were applying pressure to our own employees because this was our first game and we wanted to be good right out of the gate," he concludes. "Everyone was talking about us. Everybody put the pressure on themselves. And it created a real sadness, a malaise. It was a huge weight.

"In the time Spark was around we saw a lot of companies come and go. But we were always trying to find ways to stay alive. We'd be getting calls from headhunters trying to scalp our employees because they'd heard we were going out of business, and I'd just scream at these people, telling them they had no right to be telling our staff we were going to close down. It was only around the time of the major economic downturn in the US that I realised Spark could save some money if I wasn't there. It seemed like the right time to go. Still, I can't say I'm thrilled when I see a COD ad. There's a twinge in my stomach. We were cut out of the success that we had helped create."















 The team at Spark meets with Johnnie Stevens, a veteran of the all-African-American 761st Tank Battalion and advisor on Call Of Duty: Finest Hour's campaign. 2 Early level plans. Designers and design leads would share ideas, but later Activision brought in a team of its own to tackle level creation. 1 The CEO office of Spark Unlimited, occupied by Craig Allen. Activision kept the entire Call Of Duty family in close proximity in Los Angeles.

Michael Giacchino, who wrote the soundtrack for Frontline, also provided music on Finest Hour. To prove that its staff was working through the weekends, Spark would send photos of its full car park to executives at Activision.

1 To accurately reflect WWII, Spark wanted a diverse cast of characters. The opening level originally starred a female character, but it was changed at Activision's insistence. As well as different characters, Spark also wanted to focus on other countries and campaigns



obby Earl and Kevin Oxland, alongside senior programmer Robbie Tinman, have been working together at Spiral House for 18 years. It's no surprise, then, to find that they have a habit of finishing one another's sentences. On this occasion, there may be another reason for such keenness. Both are buzzing with nervous excitement as they demonstrate the studio's forthcoming game, the ambitious thirdperson action-adventure Troll And I. This is the long-delayed realisation of a dream. "When we first started," Earl says, "our remit was a five-year plan to do our own IP, to make our own games." But since 1999 RPG Silver, the studio has mostly taken on conversions and workfor-hire jobs. Only now, 17 years on, is Spiral House able to make good on that promise.

In some respects, Oxland tells us, *Troll And I* represents the closing of a circle: "It's got these strong adventure and story aspects, and that's pretty much where we started." The inventive and well-written *Silver* was warmly received in both PC and Dreamcast incarnations, though it was a relatively modest success. It has, in the intervening years, become something of a cult favourite; to this day, Spiral House still receives emails and Facebook messages asking about the possibility of a follow-up.

It worked again with Infogrames on the PC and PS2 versions of Alone In The Dark: The New Nightmare, assisted on Reflections' Stuntman, and followed that with the little-remembered World Racing and its sequel. Then, in 2006, Sony came calling: Evolution needed some help getting flagship PS3 racer MotorStorm out of the door. "Four of us, all coders, went on site at Evolution, we used our expertise to get it to alpha and beta, and then we did the first DLC pack," Earl recalls, proudly. "They were really happy with us, and wanted us to go back."

Sony was clearly impressed: since then, Spiral House has been credited for its work on the likes of LittleBigPlanet and Wipeout Pulse. Its strong technical background helped it earn an unlikely gig: porting the augmented-reality game EyePet to PSP, a job Sony had initially thought was impossible. "At the time, we were doing a game called Table Top Sports, and we pitched that to Sony," Earl tells us. "The PSP was really limited [for AR], but we managed to get it working. We even did a wireless co-op mode with two PSPs, but that was probably a bit ahead of its time! Sony London had already done EyePet on the PS3, and they said you can't



Technical director Bobby Earl (left) and creative director Kevin Oxland have been at Spiral House since its formation

do AR on the PSP because it's not powerful enough, and we said..." Oxland butts in: "We've done it – here it is!"

A second PSP outing, EyePet Adventures, came next, though by this time PSP sales were dwindling and, despite a raft of new features, it was less successful than its predecessor. Still, the studio was able to put its improved fur tech to good use in virtual puppy sim PlayStation Vita Pets, which eventually proved to be an



Spiral House

Founded 1998
Employees 14
Key staff Bobby Earl (technical director),
Kevin Oxland (creative director), Robbie Tinman
(senior programmer)
URL www.spiralhouse.co.uk
Selected softography Silver, Alone In The Dark:
The New Nightmare, World Racing, EyePet
Adventures, Play
Current projects Troll And I

robust prototype, with strong hints of *The Last Of Us* and Crystal Dynamics' *Tomb Raider* reboot. "We were big fans of those games, but we really liked the idea of doing a dual-protagonist game where you can control both characters, not just the one, so you can [switch] between them," Oxland says. With a prototype in place, it approached Manchester-based production studio Mi to collaborate on a CGI promo. "We wanted to give it real direction and focus, and a goal to aim for in terms of visual quality," he adds.

As much as the trailer was for the studio's own benefit, it was also designed to help during the pitching process. At first, Spiral House considered Kickstarter, with interest in the

"WE REALLY LIKED THE IDEA OF DOING A DUAL-PROTAGONIST GAME WHERE YOU CAN CONTROL BOTH CHARACTERS"

improbable inspiration for its next project. "Pets had a little story to it," Oxland explains. "You took your dog on an adventure to unravel this ancient tale about a king who used to live on the land. And we suddenly realised that we really liked doing that [type of] game."

As an author of children's books, Oxland had been kicking around an idea about a boy and a troll for some time. Earl encouraged him to rework it into a fully fledged game concept, and while the result initially seemed too expansive for a studio with just 14 staff, the pair knew the time had come to make the leap. "We thought, 'How can we do this?'" Oxland says. "And we were being offered other work-for-hire [jobs] at the time as well." But to take those on would only mean postponing their original plan even further. "It was a big risk, but we thought: just do it."

By this stage, Spiral House had amassed enough capital to self-fund development to a stage where the game could be effectively presented to publishers or any other potential investors. The studio spent a year creating a crowdfunding platform at its peak. Then Earl and Oxland attended a Develop Interface event, and saw a talk about the Square Enix Collective. "We thought, well, let's give it a shot," Earl says, "so we put it on there, and it was received really well. We got 92 per cent saying 'we'd back this', so we carried on down the line with Square for a while." But their ambitions were too great; to finish the game to the studio's satisfaction would've required substantially more money than the average Collective project.

By January of this year, the risk had paid off. Troll And I had already attracted attention from several publishers and investors ("We had several deals on the table," Earl says, "not all of them in our favour!") but it was US boutique publisher Maximum Games that eventually put pen to paper. It was its enthusiasm for the game that most impressed Spiral House. After watching a new trailer – which spliced the original teaser with gameplay footage – Maximum CEO Christina Seelye gave the most positive feedback so far. "She just said, "I want this game," Earl





Troll And I isn't the studio's only original property: it will look to raise funding for another project towards the end of the year. "We're really glad we made the leap," Oxland says

recalls. "It took her less than a minute," Oxland adds. "She was that taken by it."

If anything, Maximum's plans for the game were even grander than those of its makers. "When we first started out, because we were trying to self-fund it, we were going to go episodic, make each game three to four hours," Earl explains. But Maximum wanted a single, much larger game. Now *Troll And I* is 16 chapters long, and the studio is aiming for "a ten- to 12-hour experience". No mean feat for a team of 14 people.

While it's rare to see a game of this nature even attempted by a studio of this size, Spiral House has an experienced and capable team, and both Earl and Oxland are confident that they're up to the challenge. "Tech-wise, some of the coders have been in the industry since..." Earl begins, before pausing briefly. "Well, for example, Robbie [Tinman] wrote Hunchback on the VIC-20. And Kevin worked on Pinocchio on the Mega Drive, [as well as] The Lion King and Shadow Of The Beast."

It helps, too, that the core of Spiral House has been there for some time. Though the crash of the early 2000s hit the studio hard, reducing its numbers to just four, it has built itself back up to a similar size to the team that worked on *Silver*. And its staff turnover is low. Its most recent recruit arrived two-and-a-half years ago; the majority have been here for at least five years.

Being small has its advantages in other respects, Oxland says. "The good thing about being our size is we can get everyone together and thrash out an idea, then go back to our desks and implement it, and see if it works." It also, he suggests, makes for a greater individual sense of creative investment in the games the studio creates. "I've talked to people [at larger developers] and a lot of them don't even see the

finished game. They just write a piece of code or build a little object, and that gets put into the pool and disappears into the ether. As a creative person that's kind of soul-destroying: you build a tyre or a gun or whatever, and when the game comes out you're running through it desperately trying to find this object you built."

Earl immediately follows up. "It's even more of a shame when you see these projects that get built, and they could be a work of art, but then the studio closes down, and that code just goes off into the ether. OK, some people probably walk away with some bits. But it's so hard to make games and put them together." That might explain why the studio's code base has been

source revisions, so if I wanted I could take it back to when it first started."

Having such close familiarity with the code base not only makes adjustments and additions easier, it means the studio isn't just starting from a clean slate; rather, it has the support pillars in place to make a game of this scale. The engine may not have an official name ("We really should get around to that," Earl says) but everyone at Spiral House is aware of its strengths and its idiosyncrasies. "We've had a play around with Unity and Unreal, and it's easy to get things up and running with them," Earl adds. "But they've still got their own quirks and nuances, and you have to work around them. It's the same

"I FIXED A BUG THE OTHER DAY THAT WAS 16 YEARS OLD! I DON'T KNOW WHETHER THAT'S GOOD OR BAD"

around for even longer than most employees. "I fixed a bug the other day that was 16 years old!" Earl laughs. "I don't know whether that's good or bad. It only transpired because we were [testing] the co-op stuff and it was in the input manager. But I don't know how many other people could say that."

Is that, we ask, why *Troll And I* uses the studio's bespoke engine rather than Unity or Unreal? "Well, there are a few reasons, really. We just get more control over what we want to do," Earl explains. The engine has been growing over time into a truly crossplatform concern: *Troll And I* runs on PC, Xbox One and PS4, but it could be easily ported to other formats. "We're still coming across DS and PSP code in the code base," Earl smiles. "That's how crossplatform it is. And it's all been done through

as doing it in our own engine, but we know it, so we don't have to research any issues."

By early next year, Spiral House will finally have achieved its five-year target. It's under no illusions that the competition is fierce, but it's hopeful *Troll And I* can find an audience – and it won't have to sell in *Uncharted* or *Tomb Raider* numbers to be considered a success. "Look at all the strong IPs," Oxland suggests. "They all started out a bit rickety, but with potential. It's a fun game, with cool ingredients. And who knows? Maybe ten years down the line we'll see *Troll And I 4!*" He laughs, but there's a part of him that hopes that might just happen.

"Does it look as good as *Uncharted 4?* No," Oxland adds. "At the moment, that's beyond us." He glances over at his long-time colleague, a twinkle in his eye. "But that's our goal, isn't it?"



REVIEWS. PERSPECTIVES. INTERVIEWS. AND SOME NUMBERS

STILL PLAYING

Puzzle & Dragons i0S Most people wrinkle their nose at the £15 price-tag for WiFi on board a transatlantic flight, but a PAD player would pay that many times over. Ten hours with nothing to do but get slowly drunk, half-watch films and play the best puzzle-RPG there's ever been? Bliss. The focus of late has been on Myr, a new monster of frightening offensive and defensive power – though for once she's completely farmable, providing you can complete one of the toughest dungeons developer GungHo has ever conceived.

Dangerous Golf Xbox One A patch promising to trim those excessive loading times gave us the perfect excuse to return to Three Fields Entertainment's boisterous score-chaser. With waits cut to a couple of seconds, there's more incentive to experiment off the tee, while a new pre-putt shockwave allows you to clear obstructive debris - or, better still, to topple that final bonus item when your ball rolls agonisingly short. We might just get that full set of Platinum medals, after all.

Axiom Verge PS4

In putting together The Art Of The Pixel – on sale from all good newsagents now, Edge-special-edition fans! - we revisited a selection of pixeltastic games from recent years, and playing Tom Happ's action adventure again was a particular pleasure.
Good news for Wii U and Xbox One owners: it's due on both platforms soon.

REVIEWED THIS ISSUE

104 Deus Ex: Mankind Divided

PC, PS4, Xbox One

108 Abzû PC, PS4

112 I Am Setsuna

PC, PS4, Vita

114 Quadrilateral Cowboy

116 Headlander

PC. PS4

118 Bound

119 Song Of The Deep

PC. PS4. Xbox One

120 Overcooked

PC, PS4, Xbox One

122 The Assembly



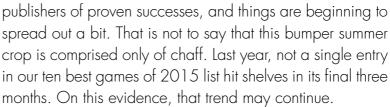
edition of Edge for extra Play content

Those summer nights

Ah, the summer drought, when all thoughts of videogames fade to the backs of our minds as we get out in the famous British sunshine. The flow of new releases slows to a drip, then cuts out entirely, save for the odd movie tie-in or sports licence. And magazine section editors the world over spend restless nights fretting about all those empty pages.

Yet here we are, in an uncommonly clement UK summer, wondering how we're going to fit all these games in – not just to the Play section, but our daily lives, lured as we are to the beer garden, the park, the Pokéstop. This must surely be a contender for the busiest August in videogame history. The southern hemisphere, locked as it is in what passes for winter down there, must be in raptures.

Clearly, developers and publishers are beginning to understand that a packed Christmas release schedule is no good for anyone except retailers and the



There's Abzû (p108), an underwater spiritual sequel to Journey. There's Quadrilateral Cowboy (p114), the most ambitious game to date from one of the indie scene's true auteurs, Brendon Chung. There's the riotous, culinary co-op of Overcooked (p120), intriguing VR mystery The Assembly (p122), and artsy ballet-platformer Bound (p118). It's a selection of remarkable breadth, a vital contrast to the Christmas season with its annual sequels, its focus-grouped reboots, its designs by committee. Like any good Brits, we find ourselves looking out through sun-drenched windows, closing the curtains and silently praying for rain.



EDGE

103

Deus Ex: Mankind Divided

here *Deus Ex: Human Revolution*'s transhumanism theme felt broadly timely in 2011, *Mankind Divided*'s deeper exploration of a world beset by terrorism, tearing itself apart over differing beliefs, mistrust, violent law enforcement and dehumanising language, is a sobering reflection of our times. Its uncomfortable proximity to current events has caused controversy, too, with language such as 'mechanical apartheid' and, more recently, 'Aug lives matter' having sparked criticism of its developer's judgement. But while there has been understandable controversy around the real-world parallels in *Mankind Divided*'s themes, that they have caused such a reaction is testament to the game's powerful depiction of the social divides at the centre of its fiction.

Set in 2029, two years after the Panchaea incident saw sabotage send thousands of augmented humans into a murderous, uncontrollable rage, this is a world where augs are marginalised and vilified. Adam Jensen is now based in Prague and part of Task Force 29, a multinational anti-terrorism unit formed by Interpol in the wake of Panchaea, but his posting has rankled some of the organisation's top brass. And while the free movement of someone as resourceful as Jensen could never be truly curtailed, he is treated with unconcealed contempt by Prague's police, ruling classes and criminal underworld. Metro stations have segregated sections for the augmented; frequent credential checks can see individuals arrested or disappeared; and unscrupulous sorts will even try to shake you down for money. While Mankind Divided gives you even more tactical and navigational options, you are still continually harassed, made to feel like a second-class citizen irrespective of your badge and (mostly) supportive colleagues.

This strain on Jensen's loyalties, as he attempts to reconcile the rights of augs with the safety of everyone, sets up the potent tension at the centre of *Mankind Divided*. While you are officially employed by Task Force 29, you'll also work with a contact from the Augmented Rights Coalition as you seek to uncover the truth behind a spate of terrorist attacks which appear to have been instigated by the activist collective, while at the same time investigating evidence of potential political steering within TF29.

The game's sprawling, complex plot provides plenty to get your investigative teeth into, and the sheer amount of available information — squirrelled away in electronic diaries, locked laptops and safes — makes it a particularly satisfying rabbit hole down which to tumble. Unfortunately, what would otherwise be a fine tale is frequently undermined by a script that can feel lumpen and hackneyed, as well as acting that varies wildly in quality. Elias Toufexis returns to voice the gravelly Jensen and is excellent throughout, enlivening even the most exposition—heavy lines,

Publisher Square Enix Developer Eidos Montreal Format PC (tested), PS4, Xbox One Release Out now

Confronted with a high fence and a gate we couldn't hack, we simply stacked some bins and hopped over



and there are several other enjoyable performances. But Toufexis consistently finds himself working alongside vocal talent whose range and nuance make Jason Statham seem like Daniel Day-Lewis in comparison, creating an incongruity that chips away at the sense of atmosphere. It's one of the few areas in which *Mankind Divided* slips up, and is made all the more frustrating given the polish evident elsewhere.

The performances and scriptwriting are at their best during the game's infrequent debates — 'social boss battles' in which you must feel your way through complex, ethically ambiguous conversations. The first of these, a chat with humanitarian aid doctor and ARC leader Talos Rucker, couldn't be a greater contrast to Human Revolution's first boss fight, which was a gamebreaking bottleneck against a walking tank. Mankind Divided's alternative is a clear statement of intent: Eidos Montreal has listened to criticism and doesn't intend to jeopardise Deus Ex's equilibrium again. Indeed, while the game does feature a more traditional boss encounter, you can tackle it however you like, and no tactic feels any less effective than another.

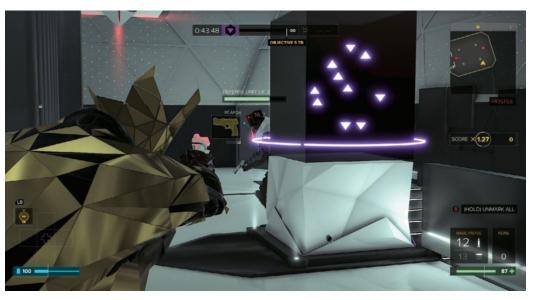
Mankind Divided's infiltration-focused action is built on the twin security vulnerabilities of selectively blind or forgetful guards and a network of ill-considered ventilation shafts, but clearly communicated and consistent rules of engagement make its systems a joy to toy with. Your options are manifold. You might hack the keypad of a bulky security door after subduing or killing the guards nearby. Or perhaps avoid contact altogether and find a circuitous route to your objective through vents and storage cupboards. A handy tranquilliser gun can put individuals to sleep, luring anyone who spots the body into your sights if you choose not to hide it. And if you can access a security computer, you could turn turrets, patrolling drones and robots against their owners. The fastidious can find passwords and door codes in emails or diaries to open previously locked doors. Or, if you can't be bothered with all that reading, you can just bust out the combat shotgun and mount a frontal assault. On one occasion, confronted with a high fence and a locked gate we couldn't hack, we simply stacked some wheelie bins into a makeshift staircase and hopped over.

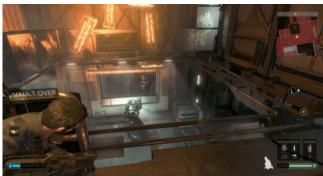
Even more than *Human Revolution, Mankind Divided* encourages you to switch tactics on the fly, responding to your mistakes by challenging you to adapt rather than punishing you with failure. If, three-quarters of the way through ghosting a heavily guarded location, you slip up and get spotted, the game switches effortlessly into a slick, muscular shooter. Ending the fracas is only a matter of breaking line of sight and putting enough distance between you and your enemies so that you can lay low for a minute or two before

RIGHT Breach levels are short bursts played as time trials that distil Mankind Divided's gameplay into something that, while more streamlined, is no less involving.

BELOW Tranquilliser darts would have little effect on this armoured guard, but switching to armourpiercing rounds would compromise our self-imposed no-kills rule. Having said that, we can always be swayed by a little cash.

MAIN Golem City is reminiscent of the Metro series' underground settlements, and equally as dingy. While this trading hub will provide all manner of basic resources, digging a little deeper may reveal other leads and opportunities







ABOVE Guns are all upgradeable, and can handle various types of ammo. While detailed customisation options are available via the inventory screen, quick switching can be handled in the field on keyboard or D-pad





things calm down again. This flexibility, combined with *Mankind Divided*'s large, complex spaces, means that you'll rarely find yourself backed into a corner with no other options.

Your efforts are supported by a mostly robust cover system – in a handful of frustrating instances we were unable to take cover behind large moveable objects, despite their size – and an expanded augmentation tree. Jensen now has access to a raft of additional tricks such as Icarus Dash, which allows him to zip a short distance through space; a temporary invisibility cloak; and bullet-stopping Titan armour. Upgrades are purchased with Praxis Points found in kits around the world, gifted by NPCs or earned by levelling up, and there are more options than you'll acquire enough currency for in a single playthrough, encouraging you to specialise. You'll also have to manage available processing power, since equipping too many augmentations will strain your core systems. You can overclock and run hot, but there's an increased likelihood of augmentations glitching out at the worst possible moment.

It's a setup that underscores the potentially dangerous lure of advancement over all else, and one that is echoed in the often startling architecture of *Mankind Divided*'s future. Prague feels much more like a real place than *Human Revolution*'s Detroit hub ever did, and there's something of City 17 in the way that technologically advanced structures encroach on the Baroque buildings of the city's past. Golem City, a ghetto on the outskirts of Prague where undocumented augs are sent, is a masterpiece of oppressive high-rise structures and disrepair. That *Mankind Divided*'s spaces feel believably lived-in, despite being carefully



PADDING OUT

Hacking doors and computers locally in Mankind Divided is represented by a revised version of the minigame seen in Human Revolution. You capture node points while trying to remain undetected by the system, fortifying points to slow any trace program you trigger and using items such as Nuke, which instantly takes a node, to gain the upper hand. It's a smart, tactically rich abstraction of hacking, but it feels optimised for mouse input: the frustratingly sluggish cursor movement when tackling them with a controller is a huge disadvantage in high-level grids.

Equipping the Social Enhancement augmentation will provide you with detailed analysis during debate encounters that can help you decide how to respond, and in some cases open up entirely new options

constructed stealth and combat playgrounds, is a remarkable achievement.

In Breach mode, however, Eidos Montreal turns its attention from clockwork sandboxes to more focused challenges. It casts players as Rippers, elite hackers who tackle abstract firstperson representations of corporate server networks. While the basic mechanics of stealth, cover, hacking and gunplay remain — you'll face system defences in the form of turrets and bipedal enemies — here you attempt to reach a data threshold by finding exposed servers and downloading their contents. Once achieved, the system will attempt to prevent you leaving with the data, so you must reach the exit before a countdown ends as the network is locked down.

Extracted data is converted into experience and credits, used to buy weapons, ammo and booster packs containing cheat modifiers (increased pistol damage or running speed, for instance) and patch modifiers which offer a score multiplier for meeting certain conditions. With online leaderboards and a slightly different augmentation tree, Breach is an attractive bonus in a package that already offers colossal replay value.

While Mankind Divided's main story thread can be rattled through in 20 or so hours, its world — in which sidequests unfurl into complex threads of their own and the potential for exploration and experimental play is dizzying — invites you to linger. This confident refinement of Human Revolution's potent, though flawed, proof of concept has resulted in one of the most elaborate videogame sandboxes in which we've ever had the pleasure of getting lost.

Post Script

Interview: Mary DeMarle, narrative director

nd they say writers come on board too late in a game's development. Mary DeMarle, Deus Ex:

Mankind Divided's narrative director, was on the project from its inception, and her work on the game has long since completed: when we speak, she's been on holiday for a month. Here, we discuss the challenges in weaving story around a vast, complex world that puts player choice at its centre — and the perils of dealing with real-world themes in a game whose planning began over four years before its completion.

Deus Ex is all about travelling the world, but in Human Revolution we never got to Europe, so we really wanted to for this game. The more we looked at Prague, the more we started feeling it was a really good fit. It's such

Why did you choose Prague for the primary setting?

more we started feeling it was a really good fit. It's such a city of contrast — the old and new. Then one of the writers discovered the myth of The Golem Of Prague, and although there are many versions of that myth, the one that really resonated with us was the one where the Jewish community created the golem to protect them. When we saw that we were like, 'Everything in our universe resonates with those themes'.

The hubs, especially Prague, are more believable places than the equivalents in *Human Revolution*. How hard a task is that for a narrative team?

Yeah, it was kind of... [laughs] quite challenging in that respect. And this time the narrative team is bigger. We had a team that was devoted to sidequests, and we had the critical-path team working on the main story. Then we had some people who are devoted to the living world, and filling that in. And someone devoted to environmental storytelling. Sometimes someone would steal somebody else's apartment for their story, and we had to move things around.

The debates are considerably improved this time around. How did you make that happen?

In *Human Revolution* we had a random component: we didn't know what 'attack' the NPC was going to throw out. He had three things he could say, and we didn't know which one would be coming. We took a little bit of that out to try and make it so we could control the flow a bit. We tested it with the team — we had this internal document so you could actually play it in text form — and then we would get feedback and tweak. Out of everything in the game, they're some of the things that get the most rewriting.

The acting feels a little uneven. Would you agree that Elias Toufexis is excellent as Adam Jensen, while others exist in his shadow a bit?



"We've been dealing with the topics of oppression and segregation for ten years. Here, we took it further"



I think you're probably right. Elias has been doing this character for a long time now. We were making *Human Revolution* for four years — it wasn't just a three-month session for him — and he tells a joke about how if he'd known when he auditioned it was going to be a four-year job he would have been a lot more nervous. So he's really gotten into that character. He knows it; we can get him into a session, and he just delivers it every time. With the other actors, sometimes it's just that we're doing pickups of scenes. You have the whole scene [and need to change something], but you don't do the whole scene again, you just get the pickup, and that throws some of the quality off. I do agree — I think we got the best we could get, and everybody did a great job, but it's hard to get that same level of quality across the board.

Moral ambiguity is a central theme, but very often you're dealing with topics where there only really seems to be one 'right' decision. How do you make the player question their natural instinct to be good? We get asked that a lot, because we're dealing with topics that, in people's minds, are very black-and-white. How do we approach that? We don't ever want to make a statement for you; we want to let you see all sides, and let you decide for yourself. That's hard, because you have to approach an issue that you might feel very strongly about, and try to find the other side of it. It's a very tough job — it makes you aware of your own biases as you're writing.

Mankind Divided deals with themes that have inspired particularly fierce reactions in parts of the game community. What's your reaction to that? We've been working on Deus Ex [games] for ten years, dealing with the topics of oppression and segregation. With Mankind Divided, we took it further. We started work on this game right after Human Revolution before a lot of these things came to a head [in the real world]. We're writing about sensitive topics, but we're doing it because they're a part of our universe - and our universe is about holding up a mirror to the [real] world. I think it's very important that we face up to these issues. The videogames I want to work on are games that have depth, and have meaning. We don't want to offend people, but we live in a society where everybody will react differently. I can only portray, to the best of my ability, what I am seeing out there.

That said, when the Paris attacks happened, I was at home thinking, 'Oh, God, are we doing this correctly?' I went back into work on the Monday and said to the team, 'Look, we've got to take a second look at how we're approaching some of this, and make sure it's online with reality'.

Abzû

he comparisons to *Journey* are unavoidable. This is, after all, a game helmed by *Flower* and *Journey* art director Matt Nava. In fact, the opening third of the game echoes so many beats of Thatgamecompany's modern classic that it's tempting to conclude that the template has simply been transplanted into a new setting: a lonely wanderer, here a female diver; a linear pilgrimage whose path frequently balloons in open areas that contain simple puzzles; and even a current-driven surge through underwater caves that echoes *Journey*'s exhilarating sand-surfing sequence.

But while both games celebrate freedom of movement, $Abz\hat{u}$ is in many ways an even more joyful expression of unstructured play. Where *Journey* saw players dance through the sky, scarves billowing behind them, here you never have to touch down as you propel The Diver through schools of fish and swaying golden kelp forests, hitching rides on the backs of turtles. And while there is darkness to overcome along the way, $Abz\hat{u}$'s outlook is one of perpetual optimism.

Just as you settle into the — entirely pleasant, it has to be said — idea of an underwater *Journey*, *Abzu* veers off in an unexpected direction in such a smart manner, playfully teasing you for making the wrong assumption, that you feel guilty for ever underestimating it. That's not to say anything that precedes that moment is in any way disappointing, however.

 $Abz\hat{u}$ begins simply, in an almost featureless expanse of water whose foggy blue is broken by the dim outline of a cave entrance in the distance. You can surface — though The Diver never needs to come up for air — but there's little life above the water, nor any islands, only floating kelp, the clouds and some gulls. As you progress, you'll encounter an astonishing number of fish, sea mammals, testudines and cnidaria. Giant Squid's engine can put around 10,000 creatures on the screen, and the result is mesmerising.

Fish shoal and dart about in response to predators as a simulated food chain plays out in front of you. Catch a lift on a larger creature (achieved by holding L2), and you'll see that they're not simply tracing an angular lap around the area, but hunting, exploring and even playing. Searching each area will usually reveal several spawning coral circles which, when interacted with by tapping Square, will release new species into the mix, often changing the dynamic of the food chain in the process. But while the spectacle is undeniable — even if the framerate suffers slightly with the largest shoals — the most surprising thing about it all is how unusual it feels to witness such convincing aquatic AI. We didn't realise it was something we hankered for until now.

This interactive nature documentary can be enjoyed by meditating on statues found throughout the game, switching the camera between the different species of fish — all of which are taken from the real world — and Developer Giant Squid Studios Publisher 505 Games Format PC, PS4 (tested) Release Out now

The tech creates naturalistic lighting conditions that frequently make you wish David Attenborough was narrating



WATER TEMPLE

The nautilus shells that you collect appear in ghostly form within the vaulted ceiling of a spectral temple you'll visit regularly throughout the game. Each chapter is bookended by the discovery of a lifeless underwater cave in which resides an ancient tower, long since lost to the salty waters. Swimming into the portal that sits on top of these pieces of forgotten architecture transports you to the alternative reality of the temple where. after completing an action that we won't reveal here in order to avoid spoiling things, you'll restore life to once-murky caves

simply watching them interact. There's surprising mileage in doing so, but some of the game's most atmospheric moments occur when you descend into the depths, Austin Wintory's stirring soundtrack settling into a low thrum as your torch flickers on.

Aquatic life isn't the only presence you'll encounter. At several points in the game you'll find burnt-out drones. Repair them, and they'll join you for a short portion of your journey, responding to the chirrups you emit by tapping Circle (a vocalisation that also attracts fish to your side) and replicating your movements through the water. They're also essential to your progress, the drones' lasers breaking down the walls that intermittently block your progress.

The puzzles themselves never get any more complicated than finding a pair of mechanisms and activating them, but the point of their presence is less about providing a challenge as it is encouraging you to explore the charismatic environments. Nava's colour palettes are astonishing, throwing murk and pastels onto the screen in combinations that feel entirely fresh, building to a breathtaking final sequence that erupts into an unforgettable chromatic bombardment. And the unassuming tech propping up $Abz\hat{u}$'s world creates naturalistic lighting conditions that frequently make you wish David Attenborough was narrating.

There's an unusual tension between the meandering, exploratory pace of the game and the desire to meticulously scour each area for all of its secrets. The aforementioned fishy portals and broken drones are never too far out of the way, but Giant Squid has also sprinkled $Abz\hat{u}$'s world with a handful of nautilus shells to seek out and collect. While $Abz\hat{u}$'s running time is a taut three or four hours, some of its locations are relatively large (especially given the necessarily ponderous pace of The Diver's movements — though this is mitigated somewhat by her ability to boost forward like a squid), and navigating them can occasionally be confusing. We left some areas with the nagging sense of having missed something, despite spending a good amount of time looking around.

Rather than a criticism, however, the lingering feeling is a testament to the sense of wonder $Abz\hat{u}$ instils in the player, the feeling of grand adventure it manages to conjure in its short runtime, and the appeal of its enigmatic world. All further evocations of *Journey*, certainly, but $Abz\hat{u}$ distinguishes itself from that project by dint of its building sense of momentum, its greater technical ambition, an unwaveringly optimistic outlook, and a neat lategame twist. It presents a welcome opportunity to immerse yourself in an ocean that's profoundly reactive to your presence, but appears content to get on with things whether you're there or not.

8





ABOVE Like Journey, Abzū's ancient structures bear the record of a past civilisation, but the art style is more evocative of Egyptian imagery than Journey's Persian influence. They also offer clues to your own provenance





MAIN Giant Squid played every game set underwater it could find while developing Abzū. Ecco The Dolphin: Defender Of The Future was a big influence, but the team also studied Super Mario 64.
ABOVE Catching a ride on larger animals reveals their complex behaviour and can even lead you to hidden parts of the level.
LEFT Astonishing sights such as this are frequent, and you'll linger in areas just to take in the view

Post Script

Matt Nava, creative director, Giant Squid Studios

s art director on Flower and Journey, Matt Nava helped define the distinctive aesthetic language of Thatgamecompany's output. Now, as creative director of his own studio, he's further exploring the potential of his striking art style, while also pushing his game design skills to the fore. (Spoilers follow.)

Does the game have an ecological message?

I think a lot of people are afraid to talk about the morals or messages in their work, but it's pretty clear that there's an environmental lesson to be learned from $Abz\hat{u}$. What we tried to do was put that in there — this message of giving back to the world and being aware of your impact on it — without beating you over the head.

How did you manage the tension between searching for secrets and the laid-back pacing of exploration?

When we first started prototyping the game, we thought we were making an open-world game, because the ocean is so vast and we thought that would be a perfect setting. But it turns out that the story we were trying to tell really needed to have this progression, and events needed to happen in a certain order. So we tried to figure out a design that was a balance of those, so that at any point you could linger if you wanted to—and there are reasons to do so—but at the same time it wouldn't take too long to figure out where to go and how to progress.

Did you deliberately make the surface feel strange?

It was definitely something that was on our minds. It's super-weird because most games when you dive into the water they start to mute the music, and it's harder to see, and you get that murky feeling. But what we tried to shoot for was that the world below is a vibrant place that you want to explore and stay in. There was a lot of temptation early on when we were designing the first levels to put islands above the water, or some kind of markers, but we decided against it. As soon as you have an island, people want to get out and explore it.

The walking section is particularly surprising.

It's funny — it's this thing that's very common in games: walking around becomes this huge surprise [laughs]. In the early designs we had this idea that the player would not only be able to swim but also walk on the bottom of the ocean, and we actually built an entire control scheme for translating between swimming and walking — so you could fall to the bottom and explore. But we realised that *nobody* wanted to walk on the bottom because swimming was more fun, and so we cut walking. Then, later on, we had the design for the area with the architecture above water, but we tried to think



"You can really move people with this medium, and create an experience that's lasting and powerful" of a way to do it entirely underwater because we'd cut walking and didn't want to spend any resources on it. But I did a quick prototype of the level and I was like, "This has to be how it is." And so we brought back walking because it was so cool.

But you also made The Diver feel frail on land.

We don't let you run super-fast — she's much faster underwater. And so it's another inversion of our own mastery of the environment. Everything in $Abz\hat{u}$ is like that. With the sound design we do a subtle thing where when you're above water we start to mute the music, which is the opposite of what most games do. It's really subtle, but it's about making the player feel more at home under the water than they do out of it.

How deliberately were you echoing Journey?

I always see these previews and people say, "Oh, it's Journey underwater," and I'm like, "Oh, you'll see..." [laughs]. You can also see influences from another game that I worked on, Flower, in there, too, and other things as well. I think visually the style is obviously designed by me, the same guy that worked on those games, and then the story that it's telling is again this lonely character in a foreign world. But what I really like about it is how it changes things and it's different from what I've done previously, but is still in that same vein. I think one of the things I took away from working with the team at Thatgamecompany was that you can really move people with this medium, and create an experience that's lasting and powerful. I wanted to see if we could make something that resonated in a similar way to Journey, but take things further. And so in many ways $Abz\hat{u}$ is a more ambitious game - full of life, lighting tech and crazy water dynamics: all these systems that are very complex and quite challenging to create.

The game feels more optimistic than Journey.

That's actually something that we talked about a lot. If you look at the real ocean it's in a very dire state, which is a sad thing as there's so much beauty there and so many inspiring things. But when I watch nature documentaries, which I do all the time — David Attenborough is my hero — often you get to the final part about the polar bears and you're just like, "Oh, god, this is going to be the most depressing thing I've ever seen..." So we wanted to create an experience that celebrated that beauty and addressed the issues that we have in the world, but also leave you with a positive sense that things can be different, that you can change yourself, and you can make a difference. So in that way we wanted to make something that was hopeful.



THE WORLD'S NUMBER ONE SCI-FI AND FANTASY MAGAZINE



LATEST ISSUE ON SALE NOW!

WWW.MYFAVOURITEMAGAZINES.CO.UK/SFX

I Am Setsuna

rading in nostalgia is a risky business. The problem with making a game designed to pay homage to genre landmarks is that it's all too easy to lapse into hollow pastiche. Classics are considered classics partly because at the time they felt fresh, exciting and different. Trying to capture the spirit of beloved games through simple mimicry is a fool's errand, unless you also attempt to evoke that feeling of the new. I Am Setsuna's mandate to follow closely in the footsteps of golden-age JRPGs, with special attention given to studying Chrono Trigger's Active Time Battle mechanic, suggested Tokyo RPG Factory was aiming for wide-eyed tribute and nothing more. Yet if it isn't as memorable as the games to which it owes its existence, it shares some of their best parts: it has a distinctive setting, a likeable cast and, yes, some good ideas of its own.

It adeptly establishes a melancholic mood from its opening moments. A mercenary, Endir, is asked to ensure the death of a young woman, the titular Setsuna. Upon meeting, she convinces him that, since they share a mutual goal — she's making a sacrificial pilgrimage to a distant shrine to maintain an uneasy truce between the humans and monsters of the world - he should thus accompany her on her journey. It's a striking setup, partly because Setsuna seems to have readily accepted her fate, and the question of whether she'll end up going through with it (and why the sacrifice's necessary in the first place) isn't answered until the end.

The story has a strong hook to drag it past any potential stumbles, then, but it doesn't falter too often until the late introduction of a familiar concept that needlessly complicates matters, when the narrative's strength lies in its single-minded simplicity. That's true of the characters you recruit to your party, too: from a scarred veteran warrior to a bespectacled young mage, each is seeking to recover from personal tragedy and finds a new sense of purpose in accompanying Setsuna. Broadly speaking, these are archetypes, but with individual idiosyncrasies that help make them easy to warm to, and that's half the battle in a genre that tends to dawdle over reaching its destination. No such worries here: your journey should be over within 25 hours.

That length feels about right for a game that shows signs of being reined in by publisher parsimony. The developer works small miracles distinguishing the villages and towns of a world in the clutch of a permanent winter, employing subtle lighting changes. varying weather conditions and delicate environmental nuances. But venture indoors and the houses blend into one, while NPC models are repeated and dungeons come in but a handful of different varieties, most of which are content to recycle the same structure of larger monster rooms connected by narrower walkways. Yet while it's obviously a Unity game, with all that implies, the art is rich in personality and there's a welcome attention to

Developer Tokyo RPG Factory Publisher Square Enix Format PC (tested), PS4 Release Out now

If it isn't as memorable as the games to which it owes its existence, it shares some of their best parts



SNOW TUNES

If I Am Setsuna is more robust than remarkable, it does have one extraordinary feature. The soundtrack from wunderkind composer Tomoki Miyoshi is played exclusively on the piano That on its own wouldn't be noteworthy, but for the quality of the compositions and the performance from veteran pianist Randy Kerber, It's rare to encounter music that is so crucial to a game's ambience: it sets the tenor with an understated elegance, shifting to accommodate the narrative's highs and lows and bursting into gleeful life with an energetic battle theme - and a post-encounter jingle - that never seems to get old. And in the story's most affecting moments it strikes a fittingly mournful chord without slipping into syrupy mawkishness.

the finer points; each new weapon, for example, is physically represented outside of combat.

In battle, meanwhile, you'll find yourself facing the kind of monsters that make you wonder why humans need to bother with a sacrifice. Yet whether you're up against a trio of rotund penguins or a pair of two-tailed ferrets riding snowballs, you'll find the rank and file hit a little harder than expected. Which isn't to say that you won't be able to finish them off within a turn or two - merely that you shouldn't rush headlong into a skirmish. Approach them from the rear instead and you'll begin battle with a full ATB gauge, allowing you to strike first. Alternatively, you can wait a little longer and fill up a further meter, accumulating up to three SP points that let you tag additional effects onto regular attacks and techs, adding more damage, inflicting status effects or landing critical hits - though you'll need to press a button in time with a bright flash that appears over a character's head as they're about to act.

Much of this might seem unnecessary given you can defeat most enemies with regular attacks, with the occasional interjection from your team's healer. But how you defeat opponents determines the items they drop, which in turn affects the techs available to you. As rarer ingredients are required for some of the most potent attacks and support skills, it behooves you to put more thought into how you finish off each creature. A powerful tech on an ailing opponent may result in an Overkill bonus; instead, you might launch a light attack with your weakest character to benefit from an Exact Kill. Wearable talismans, meanwhile, don't just give you more slots in which to equip techs, but will trigger a post-battle bonus when you pull off a tech or combo attack with an SP effect, permanently powering it up.

There are dozens of these to buy, giving you an abundance of potential options. This flexibility works well – even if, once you've happened upon an efficient combination, you'll rarely feel the need to stray too far from it beyond the occasions when key party members temporarily take their leave. Aside from one second-act difficulty spike, which is resolved swiftly enough with a change of tack (and tech), the challenge may be too easy-going for some. Optional encounters following your eventual acquisition of an airship - the most belated fast-travel option in JRPG history - will test you more than the final boss, which we defeated on our first attempt, albeit by the skin of our teeth.

A beautiful piano soundtrack aside (see 'Snow tunes'), I Am Setsuna's genial charms are perhaps best summed up by one of the game's own staff, who we discovered in a hidden retreat away from the mainland. "This game definitely isn't perfect," they modestly admit, "but it's definitely not bad, either!" That's too humble for our money, but not far wrong.



RIGHT Boss fights are the best showcase for the versatility of the combat systems, and most are very well balanced. This furry fellow is tougher than most, since his healing techs recover huge chunks of his HP bar. You'll have to find a way to slow that process.

MAIN During the final third, it's worth spending time revisiting past haunts, since the silver chests you can now unlock hold some of the game's very best gear of the game's very best gear.

BOTTOM It's a fairly trivial detail, but the thick wooden clunk as you open a door is satisfyingly tactile, demonstrating a fine attention to detail throughout the production







ABOVE You can switch between two modes of combat. Active forces you to make decisions quickly, since time continues to flow while you're in menu sections. Wait mode, meanwhile, pauses once you've chosen to act

Quadrilateral Cowboy

etting up a good workspace is crucial in *Quadrilateral Cowboy*. In front of you, you'll place your deck. This jerry-built laptop — constructed by you, since you find and install its memory, CPU and other components — features a keyboard and screen to display a command-line interface, and it's your most prized piece of equipment, used for hacking into external networks and to control various amazing tools.

To the side you'll place your CCTV unit. Its twoscreen display feeds video from some of those tools, so you'll angle it so it's visible as you type commands on your deck. One feed might be from Nell, your Weevil, a four-legged remote bot that's small enough to get under pipes and through vents. After you've connected to it using WEEVER.EXE you might tell it GO 150; TURN 90; GO 50, commands that tell it to move forward, turn to the right and move on again. Then you'll hammer out DATAJACK o to activate a node on the wall, which might switch off laser fields, perhaps, or open a window. Another video feed could be from your Auto Case, a briefcase that you set on the floor and which transforms into a gun. Run AIMBOT.EXE, zoom in the view with CAMZOOM 10, then TURN -15; PITCH 30 to position your laser guide on the target.

Not on a human, of course. This isn't that kind of game. The Auto Case is all about hitting buttons from afar with FIRE. The object of *Quadrilateral Cowboy* is to perform a series of simulated heists from your company's studio, formulating and practising elaborate raids on surreal banks, funiculars, luxury apartments, space stations and moving trucks, before getting out again, preferably without setting off alarms. The what and the why of a heist isn't important; it's the how, since this is essentially a puzzle game in which you figure out how best to use the tools at your disposal.

As you're steadily granted more, learning what they do is a thrill. You initially fumble around, resorting to typing HELP into the deck, reading sticky notes attached to it, and opening the in-game manual until, eventually, you master them. Getting Blink is a moment when you particularly begin to feel that mastery. By pre-programming Blink with chains of commands, you can perform them without having to set up your deck, allowing you to manipulate the environment as you go.

Quadrilateral Cowboy takes place in entirely discrete locations, but it feels like it's part of a wider world, one spun out from a greater universe Blendo Games established in its previous games, Flotilla, Gravity Bone and Thirty Flights Of Loving. The characters are similarly blocky and the environments just as simple, but details are every bit as obsessed over. This is a game of incidentals, where every book in every bookcase has a different title; every functioning object has a name and has warning stickers and operating notes; every drawer opens and every tap and toilet flows. It's a tactile game,

Developer/publisher Blendo Games **Format** PC **Release** Out now

By the end you'll feel you've only scratched the surface of the challenges your many tools and abilities can provide



MAKER'S MARKS

Quadrilateral Cowboy features a commentary mode, which places large markers in the levels allowing Brendon Chung to explain how the game was made. "Like any creative effort, making games is fascinating and messy," he writes, and his notes illustrate that, explaining next to a ceiling hatch how players never tend to look up. and, when you first get to the hackers' studio, how he first started to teach the player how to zoom the view. "From a certain perspective, this makes for a pretty ineffective tutorial." he admits. "But I'd say there's delight in discovery and finding things. There's a joy in noticing a detail that others might miss. He's right. It's a delight that runs throughout the game, and it's amplified when he offers insight into where it all came from.

taking pleasure in presenting you with three-stage airlocks to negotiate and complex machinery that springs into life with the press of a button. It's evidently in love with that part of the '90s when environments in games such as *Duke Nukem 3D* and *Deus Ex* began to respond in a realistic way to your passage, feeling like slices of cogent greater worlds.

And yet *Quadrilateral Cowboy* also feels entirely artificial. You're aware you're exploring sets, each painstakingly composed so it both gives you a cleanly presented puzzle to solve, comprising alarm systems to bear in mind, sightlines between windows for your Auto Case, and vent systems to send your Weevil into, and also works on a visual level, able to tell a story of what this place is and to also look great from every angle.

The very substance of *Quadrilateral Cowboy* is in some ways a rumination on the way games are worlds built in computers. There's the programming you perform as you play, and also the fact it's built in Id Tech 4, *Doom* 3's engine. In *Quadrilateral Cowboy* it gives clarity and a noirish visual drama to each scene, and it also harkens to the modding communities that sprang up around Id's engines. Blendo Games' Brendon Chung has always been very active in them, using Id Tech 2, *Quake II*'s engine, for previous releases.

If all this wasn't enough, there's also an affecting story going on of a hacker and her two friends establishing a company, Impala Solutions, building up their tech and taking on jobs. Between levels, through Blendo Games' trademark crash cuts, we experience vignettes of their lives, visiting their homes and playing badminton with them. The finer points are told through details, there to notice if you care, in contracts and certificates, with time communicated through a plant steadily growing and seasonal decorations in the office.

With so much going on, all of it so carefully realised, something had to give. *Quadrilateral Cowboy* isn't long, and by the end of its 11 levels you'll feel you've only scratched the surface of the challenges your many tools and abilities can provide. Most levels feel like tutorials, singlemindedly exploring a sole ability with only one clear solution, and only a couple give you a chance to put them all together. Some ideas are presented and thrown away entirely a level later, including a *Super Time Force*-like time-manipulation mechanic.

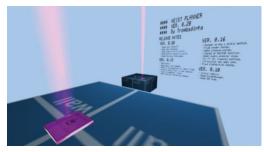
On the other hand, it keeps *Quadrilateral Cowboy* focused and more broadly accessible. Your friends' best times are there to goad you into executing a better plan faster, so there's some replayability, too. And besides, Blendo Games' ambitions seem to be on another plane. *Quadrilateral Cowboy* comes with a guide to modding, so perhaps its potential will be fully realised by its players. For a game so delightfully preoccupied with the magic of its making, that's actually pretty fitting.



LEFT The deck's command-line evokes the Linux shell and C+, but it's simplified and the game rarely requires you to concoct great feats of programming — unless you're going for fast level times.

BELOW Your Weevil is your faithful friend, emitting wheezy squeaks as you throw it into a vent. Right it with STAND and tell it to go off and sniff out a datajack.

MAIN You perform your virtual heists from your studio, or hideout (it's not quite clear how legitimate your business is), against a scratchy record-player soundtrack of Caruso and Debussy, if you choose



ABOVE Nods to programming culture are all over *Quadrilateral Cowboy*, as are games within the game. There's a stealth car game (drive through a city without getting spotted) and a text adventure to hunt down





Headlander

ouble Fine is rightly proud of the diversity of its output, but regardless of genre, each time you sit down in front of a new release from the studio, you have a pretty good idea of what to expect. You'll get an unusual, rich and memorable setting. You'll get warmth, heart and character. You'll get inventive set-pieces, wry one-liners, sight gags, and throwaway asides, with a surfeit of optional dialogue that will make you want to investigate every character and interactive object. Beyond all that, you'll get a game that plays at least reasonably well. It might not be spectacular, but it will be entertaining enough, with a challenge that rarely frustrates. And when you finish, you'll look back upon it with a certain fondness; not, perhaps, with dewy-eyed wistfulness, but nor will you regret the time and money you invested in it.

So it is with this off-kilter sci-fi adventure, conceived by writer-director Lee Petty, whose previous game, *Stacking*, invited you to control not one character but several, assuming a range of guises in the form of Russian nesting dolls. *Headlander* is built around an idea not too dissimilar in concept: you play as a disembodied head that must use a range of different robot torsos to progress. The biggest difference is structural. *Stacking* was a puzzle game, while *Headlander* is essentially *Metroid* if Samus Aran's morph ball could float.

At first, it seems to have enough new ideas to make it more than a witty and attractive genre piece. The retro-futuristic space colony within which the bulk of the game is set has plenty of space for civilians, but the rest is kept behind closed doors, which only patrol bots called Shepherds can pass through. They're coded according to the colours of the rainbow, with later colours afforded greater clearance: red robots can only use red doors, while violets can use their own colour as well as blue, green, orange, yellow and red. It's a clever twist that fits neatly within the game's fiction.

To commandeer a robot, you'll need to fly above them, use your vacuum power to remove their head, and replace it with your own. It's a pleasurably tactile process - you'll hold down a button or trigger to start loosening the head from its moorings and feel a slight upwards jerk as it pops free. Good job, too, since you'll need to repeat it hundreds of times throughout the nine hours or so it'll take you to finish. The AI controlling the Shepherds rarely takes kindly to your activities, however, and more troops will quickly converge upon you. Larger environmental objects can be used as cover, letting you adjust your aim from a position of safety before leaning out to fire off a few shots and ducking back while your weapon recharges. It's snappy and enjoyable, with an interesting design wrinkle: since you might wind up needing their bodies, it doesn't always pay to destroy your opponents, or even damage them too heavily. The ideal approach, then, is to target their

Developer Double Fine Productions Publisher Adult Swim Games Format PC (tested), PS4 Release Out now

Stacking was a puzzle game, while Headlander is Metroid if Samus Aran's morph ball could float



HEAD AND TALE

The incidental dialogue is typically humorous, yet the story is played as straight as a tale starring a floating human head is ever likely to get. The pitch is that humans have opted to upload their consciousness to the cloud, liberating themselves from their flimsy meatsack bodies and upgrading to sturdier robot torsos. However Methuselah, a malevolent AI, now has the robots - and by extension the entire human race - under its control, and no one knows where the bodies are kept. As seemingly the only option to save humanity, your head is brought out of cryosleep, with the help of an army of female robot freedom fighters and a mysterious ally called Earl. It's hardly high art, but it's solidly constructed, with one or two neat twists.

heads. An aiming line shows you exactly where your laser will end up once it's bounced off a wall, letting you decapitate them when you're facing away from your target — though that means they can also hit you when you're in an ostensibly safe place.

By the time you find yourself facing green and blue Shepherds, with lockdowns barricading the exits until you've killed enough of them, the action has begun to resemble an expensive firework display, with a variety of brightly coloured bolts criss-crossing the screen. Yet with dashes, rolls, upgradeable melee attacks and a crystalline shield for the occasions you find yourself sans torso, you'll always have enough to cope, even if the sometimes distant camera can leave you straining to make your head out amid the chaos. The energy points you'll accumulate to spend on these abilities are a little too easy to come by: just keep an eye out for the grey dots on the map denoting vents, remove the casing, head inside and grab your reward. With a few exceptions - such as punching a robot through a like-coloured door and quickly following it through - locating secrets rarely requires much thought.

That would be less of an issue were your objectives not similarly formulaic: three of your main goals involve deactivating security lasers, realigning satellite dishes, and shutting down computers to remove lift locks.

There's a flash of inspiration in the game's midsection, as you attempt to keep robot chess pieces intact while ferrying them back and forth across an indoor arena in the heat of a competitive battle; soon after, you'll fight a braying queen who demands you keep switching sides to damage her. These sequences prove Double Fine can come up with more imaginative quest ideas, and it's a pity we don't see more like them.

The notion that *Headlander* never fully capitalises on the promise of its principal idea is addressed — possibly inadvertently — by an offhand remark from one of the game's true stars: the wonderfully dry security AI. "What are you going to do with that power?" she asks, as you stride by in your violet armour. "Maybe open up some more doors?" It's a funny line, delivered in exquisitely withering fashion, but it also highlights how mundane your new ability is. It's odd to accuse a game in which you can command a miniature dust buster of lacking mechanical invention, but here we are.

It says much for *Headlander*'s force of personality that little of this registers as you play, beyond a distant sensation of faint dissatisfaction. From the disarmingly straight-faced plot to the gorgeous, vibrant set dressing, and the pulsing, Jarre-esque synthesisers of the menu theme, the world is a pulpy delight: captivating, unique, and a genuine pleasure to spend time in. Adult Swim might be the publisher but, for better or worse, this is every inch a Double Fine game.





ABOVE Sidequests offer some of the more entertaining head-swapping puzzles. One mission sees you retrieving a missing dog for a bereft citizen, while later you're asked to collect five robot bodies for an experiment



TOP Not all bodies are equally useful, though you're rewarded for your dedication to decapitation: most torso types come with their own unique dance moves.

MAIN Power-ups are sometimes hidden behind barriers that require you to bounce shots off multiple mirrors simultaneously before they yield. It's a process that's neither particularly challenging nor rewarding.

RIGHT Warp points allow you to fast-travel between zones, and the brisk loading times mean that 'fast' isn't a misnomer. The map's just about large enough to make teleportation necessary, ensuring you'll rarely have to backtrack far



Bound

ell, we hadn't quite expected this. We thought Bound was a game about a balletic alien girl in a low-poly, voxel-heavy dreamscape. Yet Plastic Studio's third full game opens with us in control of a heavily pregnant woman arriving at a beach, sitting on the sand and opening a notebook. Before long, our initial expectations are met, but we'll return between levels to the beach, our avatar making her way slowly towards a distant house. By the end you'll realise Bound's reality is of far greater import to its story than the fantasy that makes up the bulk of its slender, evening-long runtime. To say why would be to spoil what is a deeply personal tale, and one that'll likely strike a chord with even those who haven't been touched by the darkness it confronts. Only in its final act does Bound truly show its hand, but there are hints of it as you progress, in mid-level sections where you explore snapshots of the woman's childhood memories.

Yet for all the mournful ambiguity of its narrative, in the hands *Bound* is a delight, thanks to its lithe, beautifully animated protagonist. Take, for instance, that most hackneyed of 3D-platformer conventions, the shimmy across a narrow ledge. Nudge up against the adjacent wall and our heroine performs two 360-degree

A rollercoaster-style fabric glide closes out each of the levels. Symbolising the woman breaking free of her fears, they're reminiscent of *Journey's* sand-surfing section, but here they're automated, rather than controllable

Developer Plastic Studios, SIE Santa Monica Studio Publisher SIE Format PS4 Release Out now



KEEPING TIME

Finish the game and a speedrun mode unlocks, with PBs tracked in a global leaderboard. There are shortcuts within levels, opportunities for sequence breaking, and tricks within the dancer's moveset - a roll into jump, for instance - that speed her up. Completionists can seek out the collectible memory shards, and those who prefer to take things slower can nudge the touchpad to activate photo mode. Story-led games are, by their nature, rarely replayable. but Bound bucks the trend

spins onto the ledge, dramatically leaning into the wall each time, before tippy-toeing along it. Hold the run button, or jump along it, and you'll see further variations. It's a recurring theme. Every action is executed with such elegance that it's hard to resist slowing down and doing everything with a flourish.

Stylish as it is, *Bound*'s locomotion serves a vital purpose. As you sashay and shimmy your way through the strange world, you'll be accosted by enemies, thickly swarming, locking you in place, the dancer curling up, crying out in pain. Hold R2 and her walk becomes a dance; press a face button and she'll bust a move, then another. Ribbons swirl around you in an expanding globe, serving as a few seconds' worth of shield. A well-timed tap of the Square button will cartwheel her away from a threat, but there's pleasure in letting it draw near and attack before you dance it into submission.

With an ethereal, ambient soundtrack and a persistent lack of threat — enemies can't kill you, and a mistimed jump simply deposits you back on the previous ledge — *Bound* is meditative to the point of feeling soporific. But you're propelled through it by the desire to see where its component strands are leading. And once you've found out, chances are you'll be back for more. After all, who can resist the offer of spending an evening dancing their troubles away without having to get up from the sofa?



Song Of The Deep

his gear-gated bedtime story is the latest of a recent slew of in-house passion projects from heavyweight studios. A ten-hour undersea fable about an inquisitive and resourceful fisherman's daughter who builds a rickety submarine to rescue her missing father, Song Of The Deep was inspired by creative lead Brian Hastings' desire to create a positive role model for his own daughter. Merryn is certainly that: hopeful, courageous and impressively hardy. Alas, a similar combination of unblinking optimism and resilience is needed to finish her game.

For the most part, Song Of The Deep is content with being pleasantly unremarkable. Its aquatic setting never quite feels authentically hand-crafted, and it never inspires the sense of awe suggested by a lovely but overwrought soundtrack, which swells over new discoveries that rarely warrant such swooning.

As you head towards the next glowing X on your map, you'll invariably bump into the odd barrier. Wooden obstacles can be punched through with your sub's magnetic claw; for sturdier blockages you'll need to drag around mines, which usually involves pulling them through narrow gaps before attempting to swing them into position and letting go without getting

The more organic environments are among the prettiest in the game: presumably we're supposed to be dazzled by an underwater city, but with its levers, gates and pressure plates, it can't help feeling familiar **Developer** Insomniac Games Publisher GameTrust Games Format PC, PS4 (tested), Xbox One Release Out now



PURSUIT FARCE

Song Of The Deep reaches its nadir with a dreadful trialand-error chase sequence, during which you must escape from deadly squid that can destroy your craft in an instant. Rather than the same group hunting you for the duration, invisible trigger points will snawn more squid closer to you. They don't have to make contact to suck you in, and so you can be killed for not having the clairvoyance to know their exact spawn positions

caught in their blast radius. It's typical of the kind of cumbersome, patience-testing challenge here: you'll often find yourself shunted about by sonar waves and strong currents, or slowly herding obstructive jellyfish with your headlights. Later, you'll spend some time with an extended light-reflection puzzle, which involves repositioning a series of mirrors, and was almost certainly more fun to design than it is to play.

Exploration is prioritised over combat, which is sensible since the latter is rather basic. Your claw is enough to clobber most enemies; you can use missiles to deal with the rest. Yet the sub's sluggish movement and the motor's slow recharge rate discourages you from hunting the collectibles that would make probing these depths more palatable. The narrator's presence, meanwhile, lessens the sense of discovery: it feels less like you're venturing into uncharted waters so much as bumbling about before cueing up the next chapter.

If the storyteller's soothing lilt encourages you to drop off, the closing stretch is a rude awakening, as you're locked into cramped rooms stuffed with tedious volumes of bola-chucking anglerfish, spine-spitting urchins and clusters of jellyfish that rush you before exploding. Otherwise, Song Of The Deep is more successful as a lullaby than a fairytale: by the time vou've beaten a lackadaisical final boss, you'll probably be feeling pretty drowsy.





Overcooked

h, bugger, the chips. One of our number has just come a cropper and fallen off the block of ice we call a kitchen, taking a vital order of fries with him. Our companion will be back in five seconds and the plate will respawn soon after, but the clock is ticking and that stack of tasty fried potatoes is gone forever. Even if the four of us work in perfect harmony, there isn't enough to time to fill that final order — the last one we need to get the maximum, three-star rating.

And we will not, in all likelihood, work in perfect harmony, or anything like it. Failure is simply the cost of doing business in *Overcooked*, and all part of the charm. There are little snapshots during levels when everything sings, when you think the four of you should go into the restaurant business together. But they are few and far between, and that is the point. *Overcooked*'s design ethos is a succession of potential points of failure, strung together like sausages.

The controls, at least, are simple — one button to pick up or put down an object, another to chop, prep or wash it — but even the most basic tasks you're asked to perform are likely to go horribly wrong. Take, for example, the humble hamburger. First you must tenderise a steak, and form a patty from it. Then,

The order UI is a little unfriendly – the coloured timer bars could do with being more prominent. Worse is the fussy positional recognition that frequently sees you put a finished dish in the bin, instead of on a plate Developer Ghost Town Games Publisher Team 17 Format PC, PS4 (tested), Xbox One Release Out now



TEMPERATURE CONTROL

Despite needing four players to truly shine, there's no online co-op in Overcooked. There's support, at least, for two or three players, scaling action durations as appropriate, and it's even playable in singleplayer, though switching between two chefs with a shoulder button is no substitute for the real thing. Those short on controllers meanwhile, will be cheered that Ghost Town offers a split-controller feature, which lets two players play on one gamepad at the same time

while the burger cooks, you must find a plate and bun, then chop lettuce and tomato. All the while a timer ticks down — the longer you take, the lower the tip, which affects your overall score — and the orders just keep stacking up. This one wants lettuce, but no tomato. Vice versa for another. The next one, bless them, simply fancies a burger in a bun; the following one wants the works. Ugh. We used to like burgers, you know.

Simply keeping on top of the chaos amid the hubbub of a busy kitchen would be tough enough, but *Overcooked* complicates things further with some devious level designs. One puts you on the deck of a ship: every so often the boat tilts to the opposite side and takes some of the kitchen with it. Another puts the pantry, prep area and fryers on the backs of three moving trucks and has them move together and apart over time.

There are plenty of smart ideas here, but a fair bit of dreck too, as Ghost Town Games tries to transplant the structure and length of a singleplayer game to local fourplayer co-op. *Overcooked* would not have suffered for having fewer levels and it would be a better game for the absence of a three-star rating system that frequently forces you back to earlier levels before you can progress. In a game where failure is as much fun as success, and a good deal more achievable, it's disappointing that *Overcooked* spends a large portion of its runtime feeling too much like hard work.





STAR WARS: PAST, PRESENT AND FUTURE INDIANA JONES: The origins of a hero MERCHANDISE, MYTHOLOGY AND MORE

FIND IT ON THE NEWSSTAND OR ORDER YOUR COPY FROM MYFAVOURITEMAGAZINES.CO.UK

The Assembly

ou'll spend a great deal of time reading emails on flatscreen monitors in *The Assembly*. It's a hoary mechanic that ironically serves to highlight the unfulfilled potential of this made-for-VR sci-fi adventure. The story, told from the alternating perspectives of whistleblower Caleb Pearson and disgraced neurologist Madeleine Stone, is breezy enough — even if the cringe-inducing am-dram performances make it impossible to ignore a weak script and heavy-handed exposition — but nDreams never once uses VR for gameplay reasons.

It does employ some smart structuring, however. Stone's chapters see her endure the heavy-handed interview process of the titular secretive organisation as she tackles simple block and shape puzzles, as well as some light detective work. The latter offers the game's only real peak in the form of an intriguing murder mystery, but while it explores entertaining ideas, none of them draw on VR's potential. Pearson, meanwhile, spends his time unlocking doors and exploring the facility in his attempt to expose the unethical practices of some of its occupants.

Despite nDreams' apparent reluctance to push VR's gameplay scope, the sensation of presence makes

The sense of presence imbued by the game's incorporation of virtual reality makes this sequence, in which you must determine the identity of two conspiring murderers from a lineup of manikins, particularly eerie

Developer/publisher nDreams Format PC Release Out now



REQUIRES SOME ASSEMBLY

Bizarrely. The Assembly - which nDreams describes as being "designed from the ground up for VR" - is available without virtual reality functionality for f14.99, or as a full-fat version for £20. If, for some inexplicable reason, you plump for the former and subsequently regret it, worry not: you can simply cough up the extra £5 on Steam to unlock your game's full potential. It's a perplexing offer and one that serves to further underscore the game's superficial relationship with VR.

the warren of labs and offices a pleasure to explore. As does the game's only innovation: a fine-tuned warping system. Termed 'blinking', nDreams takes the familiar mechanic and dispenses with the usual predetermined endpoints, letting you choose where you want to appear. Holding the left trigger will bring up a silhouette of your character, which you can place by looking around before tapping A to blink over to your destination. You can fine-tune your position, while flicking the right stick will see you move instantly between the four compass points. It's a considered system that eliminates nausea and also lets you move around with satisfying, liberating speed.

Your progress will be somewhat slowed by all those emails, but also by the empty drawers and cupboards you'll feel compelled to open in your search for the occasional story-critical item. And there's a small, but frustrating, delay after a piece of dialogue has played out before you're able to interact with anything again. Given the game was built from the ground up for VR, its underuse is disappointing, and the paucity of memorable moments is especially painful given the series of amusing allusions to groundbreaking games such as Mario, Half-Life and Resident Evil. The Assembly is yet another example of mundane game design attempting to hide behind the novelty of VR.

The mileage in this strategy is running out.





SPECIAL COLLECTOR'S EDITION



New issue on sale

<u>FINAL FANTASY XV</u>

30 pages of new info, screens and FF celebration!

FREE Two incredible Final Fantasy XV decals for Xbox One



DriveClub

Why Evolution Studios' rebuilt wreck is worth a another spin

BY BEN MAXWELL

Developer Evolution Studios **Publisher** SIE **Format** PS4 **Release** 2014

dependent on a vehicle's capabilities as a driver's skill. An underpowered or poorly set-up car could unravel the hopes of even the best driver. So imagine the disadvantage you'd face if you rocked up to the circuit in a car with huge chunks missing, and were arriving, bedraggled and apologetic, nearly a year after the scheduled track day. Unfortunately, that's exactly how things panned out for the now-defunct Evolution Studios. Liverpool outfit had been a valuable member of the PlayStation pit crew since Sony acquired it in 2007, a deal completed after Evolution had helped launch PS3 with MotorStorm. Yet the studio's luck ran dry with the twice-delayed, feature-starved jalopy that was release-day DriveClub, a lumbering shadow of the game that should've been the premier graphical showcase of PS4's launch lineup. Play the game today and it's barely recognisable, such is the extent of the panel-beating job Evolution has done in the almost two years since the game went on sale.

uccess in motorsport is as

In the unprecedented absence of either a Gran Turismo or Ridge Racer at the launch of a new PlayStation, Evolution was presented with the opportunity to lift the curtain on the next generation of racing games. That opportunity was missed in remarkable, regrettable style. When DriveClub finally did arrive, a litany of broken promises, empty spin and a delay that placed it well outside of any kind of timeframe that could even charitably be described as PS4's launch window - it finally wheezed over the finishing line just shy of 11 months after its host hardware - stripped the sheen from an event that should've been a landmark. Offered a coronation, Evolution abdicated, So tired were potential players of being given the runaround that DriveClub's eventual release was a relief, rather than cause for celebration. And that was only the case for those who still had the energy to care - many others had long since written off DriveClub entirely.

At launch, at least, they were right to. In stark contrast to what Sony and Evolution had promised, on day one *DriveClub* was a stripped-down racer shorn of its showcase

dynamic weather, lacking crucial features such as replays, bogged down by ruinous opponent AI and overly punitive marshalling. Worst of all, the game was beset by crippling server problems that meant many couldn't experience the game's apparently innovative online components at all. And, adding to *DriveClub*'s growing image problem, the promised free version of the game — a handful of tracks and cars with which to tempt PlayStation Plus subscribers into buying the full package — was put on the back burner indefinitely.

Evidently the pressure of attempting to finish the game in time for a console launch proved too much for Evolution, and the subsequent firefighting with which it was faced was a further burden on the already stressed studio's resources. Back then, it was obvious that this clearly unfinished game needed even more time in the oven. It's illustrated by the confident package on offer today, assembled in piecemeal fashion in the months following the game's messy, miserable, unforgettable launch.

Evolution started with the basics. something you might suggest it should have done in the first place. It set about resolving connectivity issues, server-load problems and instabilities in the code that were causing a few too many of the wrong kind of crashes. Six updates were dedicated to this emergency surgery, in fact, and it wasn't until v1.07, over a month after the game's debut, that Evolution had a chassis robust enough to build upon. Chief among these early additions were the Ignition and Photo Finish tour packs, which added new tracks, cars and events to the game and were given away for free by way of an apology for the protracted server issues players had gritted their teeth through. There was a more cosmetically focused addition in the form of photo mode, too, but most important was the sweeping change to corner-cutting and collision penalties.

DriveClub's aggressive AI, which will still happily ram you today but was considerably more violent back in 2014, made the game's apparent eagerness to punish you for the slightest of transgressions immensely frustrating. And knowing your speed would be suddenly limited, as if someone had watered down your fuel, for so much as

kissing the verge with a wheel made hairpins considerably more daunting than they should be. Play today and, while there's still the odd questionable penalty decision, the action feels much fairer.

The weather system — shown in our final preview session with the game — eventually arrived two months after launch. The impact of its arrival was profound, with both positive and negative results. For starters, it provided a not-inconsiderable boost to the visual impact of what was already a handsome game. To this day, DriveClub remains visually peerless within its genre. At the time, the only racing game that came close to the drama and spectacle of DriveClub's storms was Need For Speed Rivals. But Evolution's work remains the literal high-water mark of the genre, creating some of the most terrifying driving



whole new location, Japan, to the game, a rural setting flecked with cherry blossoms giving a softer edge to the visuals. Evolution also made adjustments to the aggression levels of the AI (euphemistically referred to in the patch notes as "Changes to AI drafting behaviour"). But although the game's AI has been continually tweaked throughout its lifespan, it's still a bolshy presence. On-track drama is certainly

DriveClub looks its best during wet weather, when the game's astonishing lighting engine and unparalleled precipitation effects conspire to create often photorealistic results

ALTHOUGH THE GAME'S AI HAS BEEN CONTINUALLY TWEAKED THROUGHOUT ITS LIFESPAN, IT'S STILL A BOLSHY PRESENCE

conditions seen in a game since Evolution's own MotorStorm: Apocalypse.

Though the unvielding lighting engine of DriveClub's launch build made for some moments of poor visibility, threading a Koenigsegg Agera R through the tight, twisting roadways of the game's vision of Scotland in the middle of a lightning storm at night is something else entirely. But the late arrival of dynamic weather also created an enduring rift in the game. Existing tours couldn't be retrofitted with the new technology since it would've invalidated the existing leaderboards; they now sit as incomplete-feeling monuments to the original, incomplete game. Every additional DLC pack since then has made good - some argue too frequent – use of the tech.

Evolution was now getting into the swing of things, and soon after added a

increased as a result, but it also invokes unwanted memories of heavy-handed '90s rubber banding. Play your role in the unfolding script of each race, making sure you don't overreach with regard to your position before the lap that deems it OK, and both player and AI can find common ground. Nonetheless, *DriveClub* is at its best when you're the only vehicle on the track.

Still, that update also threw in some new, more dazzling weather effects, in the form of heat haze and rainbows. And, more practically, the speed of windscreen wipers was increased. Mirages followed in the next update, in March 2015, along with another hard-to-believe sight: replays. As with so much in *DriveClub*, they were worth the wait — even if initially only singleplayer replays were added to the game. Multiplayer equivalents would follow a little later.



While DriveClub's bikes still feel a little light and flimsy, they make even familiar bends feel brand-new



POWER SLIDE

Evolution started to show signs of ill health in March last year when 55 people around half the studio - lost their jobs. A year later, Sony closed the remainder of the company, ending a ten-year relationship and citing the need to ensure that its resources were dedicated to "highquality, innovative and commercially viable projects". It was an ignoble end for a studio that consistently pushed the racing genre into new territory, and a blow that came just a fortnight after Microsoft's closure of fellow UK studio Lionhead. Thank goodness, then. for Codemasters, which hired the entire development team creating something of a UK racing powerhouse. DriveClub's future may be uncertain, but Evolution's talent will race again.

The tight roads of Scotland's recently added Old Town track





DriveClub's audio still puts every other racing game to shame. Evolution captured every car's engine using external and internal mics, and they roar and splutter in an entirely convincing way

Though Evolution maintained continual flow of patches, the next sizeable update came that August, when Sprint mode was added, allowing drivers to take advantage of the game's fast loading times and tackle challenges or short sections of each track against the clock. But Evolution eclipsed this two months later with the surprise release of DriveClub Bikes. Videogames have long struggled to represent two-wheeled motorsport in a flattering light, but Bikes got it right, applying the game's alarming sense of speed to the twitchy precision required when hustling a motorcycle. DriveClub tracks were transformed when tackled on two wheels. too, with cambers you had barely noticed suddenly feeling like cliff faces, and the meandering, even forgettable routes along engaging, and made all the more special in the context of the game industry's struggle with bike physics, even if Evolution doesn't try to hew to realism closely.

Updates that followed in the months leading up to Sony's closure of the studio saw the game diverge, gaining both a long-overdue Easy mode, which tempered the sometimes brutal difficulty level with less-demanding objectives and opponents. and a Hardcore Handling model for those silly enough to attempt wet races with no driving aids. Switch it on, and the game's weighty handling suddenly feels more substantial, brakes locking under excessive demands and formerly unthreatening corners asking much more of you. It's revelatory, and makes time-trial driving on these superbly designed circuits even more pleasurable and involved than before. It feels like a whole new game.

DriveClub's rebirth has been remarkable. Few games have ever undergone such an extensive transformation, but even this almighty effort wasn't enough for DriveClub to gain the traction it needed to flourish, and Evolution reached the end of the road. The game that exists now feels like an open secret, catering to those who saw its potential and have stuck by it over the past couple of years but ultimately failing to win back the players who walked away from its launch disaster. To those in the know, though, DriveClub offers videogame driving that is, in many respects, peerless.





MASTER ALL-NEW CG ART TECHNIQUES

From environment creation to character modelling, master the skills and tools to break into the games industry!



GET YOUR NEXT ISSUE FREE!

Download our no obligation digital trial offer now!

Newsstand for iOS: www.bit.ly/3dworld-app Print: www.myfavouritemagazines.co.uk/3dwsubs

Issue 212 on sale now!







DISPATCHES **PERSPECTIVE**



JAMES LEACH

Postcards From The Clipping Plane

Conveniently ignoring the serious side of videogame development

early every developer I've ever met has also been a great lover of playing videogames. It's obvious, really. Love of videogames plus chunk of talent equals job in the videogame industry. But gaming is a very different experience for those who know how they're made. First off, we love looking for imperfections. It's not enough that we make games and people like buying them; others make games and we must find their mistakes and errors. I'm not talking about crashes and show-stopping bugs. Finding those in games is just heartbreaking. No, I mean the little things. The bad animations, the glitches, and, for me in particular, the misread or badly delivered lines of dialogue.

Not only do dev types analyse every game, but they play them differently. I have seen Al programmers defeat hordes of NPCs simply by knowing how their algorithms are put together. It was like watching someone employ god mode. And others intuitively understand shortcuts, tricks and other devices in games because if they'd worked on those titles, they've had done the same. Sometimes it's as simple as just knowing where the hidden collectible items are going to be located. You just know.

Back when I was reviewing dozens of games a month, one of the things I had to be good at was getting as far into a game as possible in the shortest time. Owing to our magazine deadlines, we simply didn't have the luxury of days and weeks to fully explore the nuances of every game. Luckily, though, these were simpler times, and not many games were particularly nuanced, so it usually worked out fine. As a reviewer, what was important was that, if you sometimes couldn't see all of a game, you had to have seen as much of it as possible. It's actually a bit shocking, really. Imagine writing a film or without having music album review experienced it in its entirety. But if you have two days in which to turn out 500 words about a game, it's likely that there are bits of it you will never have seen.



Having a place where people can grind is not unlike having a drop-in centre where people can get clean new needles

Now, I play games for two reasons. The first is that I'm working on them, so it's got to happen. The second is that I enjoy them. I love everything from the unboxing to the ragequitting to the restarting to the hopeful completion. Getting to see everything is a bonus, and I like to think it's a way of nodding some respect to the developers - that what they've put in will get appreciated. (Unlike some of the lines of dialogue they should have re-recorded. I'm not too generous.)

So while I think I know my way around playing and, in a non-coding sense, making games, I still get surprised. I noticed that a

firstperson shooter I worked on a while back contained a side mission which was far easier than it should have been, and earned the player more points than it warranted. I asked about this weird little anomaly and it turned out that the mission was there purely so that players who wished to could grind up their points and levels. Am I alone in finding this shocking, astonishing and somehow... wrong? There are missions in games that exist solely to reward those who want to max out their points or stats?

I had quite an interesting debate with the guys who were making the game. Should grinding be discouraged? Should it be encouraged? Or perhaps it should be simply ignored. I reckon the latter. But it's odd that I should actually get upset that we'd put a dedicated grinding mission in a game, and yet I'd have no problem if the same game contained a secret level in which the player couldn't be harmed. Or, as discussed above, the player could sidestep and mangle armies of Al-controlled enemies by simply learning their behaviour.

The more I think about this, the more unreasonable I think I'm being on this issue. Having a place where people can grind is not unlike having a drop-in centre where people can get clean new needles with which to take drugs. You're not condoning the druggy/ grindy behaviour by acknowledging that it exists and providing a safe place where it can take place. If anything, it's a highly enlightened and mature attitude.

Perhaps it's simply my view of grinding that's the issue. It simply didn't exist when I did the vast bulk of my game playing, and, like my forefathers before me, I take a dim view of anything newfangled. In my day you simply had to play for long enough in proper levels and know which crate to destroy in order to earn yourself a decent railgun. It's not like that any more. Mercenary assassins today really don't know they're born.

James Leach is a BAFTA Award-winning freelance writer whose work features in games and on television and radio

#298September 15



